



PROPOSAL AND CONTRACT DOCUMENTS

FOR THE CONSTRUCTION OF (NON EXEMPT)

2

Clearing & Grubbing, Guardrail, Mill, & Overlay approximately 14.4 miles of I-55, from MS 8 to MS. 330, known as Federal Aid Project No. IM-0055-03(076) / 103395, in the Counties of Grenada & Yalobusha, State of Mississippi.

Project Completion: 110 Time Units

NOTICE

**BIDDERS MUST PURCHASE A BOUND PROPOSAL
FROM MDOT CONTRACT ADMINISTRATION DIVISION
TO BID ON THIS PROJECT.**

Electronic addendum updates will be posted on www.goMDOT.com

SECTION 900 OF THE CURRENT (1990) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION JACKSON, MISSISSIPPI

**BIDDER CHECK LIST
(FOR INFORMATION ONLY)**

- _____ All unit prices and item totals have been entered in accordance with Subsection 102.06 of the Mississippi Standard Specifications for Road and Bridge Construction.
- _____ If the bid sheets were prepared using MDOT's Electronic Bid System, proposal sheets have been stapled and inserted into the proposal package.
- _____ First sheet of SECTION 905--PROPOSAL has been completed.
- _____ Second sheet of SECTION 905--PROPOSAL has been completed and signed.
- _____ Addenda, if any, have been acknowledged. Second sheet of Section 905 listing the addendum number has been substituted for the original second sheet of Section 905. Substituted second sheet of Section 905 has been properly completed, signed, and added to the proposal.
- _____ DBE/WBE percentage, when required by contract, has been entered on last sheet of the bid sheets of SECTION 905 - PROPOSAL.
- _____ Form OCR-485, when required by contract, has been completed and signed.
- _____ The last sheet of the bid sheets of SECTION 905--PROPOSAL has been signed.
- _____ Combination Bid Proposal of SECTION 905--PROPOSAL has been completed for each project which is to be considered in combination (See Special Provision No. 907-102-1).
- _____ Equal Opportunity Clause Certification, when included in contract, has been completed and signed.
- _____ Subcontract Certificate, when included in contract, has been completed and signed.
- _____ The Certification regarding Non-Collusion, Debarment and Suspension, etc. has been executed in duplicate.
- _____ A Certified check, cashier's check or bid bond payable to the State of Mississippi in the principal amount of 5% of the bid has been included. Bid bond has been signed by the bidder and has also been signed or countersigned by a Mississippi Resident Agent for the Surety with Power of Attorney attached or on file with the Department's Contract Administration Engineer.
- _____ Non-resident Bidders: ON STATE FUNDED PROJECTS ONLY, a copy of the current laws regarding any preference for local Contractors from State wherein domiciled has been included. See Subsection 103.01, Mississippi Standard Specifications for Road and Bridge Construction, and Section 31-7-47, MCA, 1972 regarding this matter.

Return the proposal and contract documents in its entirety in a sealed envelope. **DO NOT** remove any part of the contract documents; exception - an addendum requires substitution of second sheet of Section 905. A stripped proposal is considered as an irregular bid and will be rejected.

Failure to complete any or all of the applicable requirements will be cause for the proposal to be considered irregular.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TABLE OF CONTENTS

PROJECT: IM-0055-03(076) / 103395 - GRENADA & YALOBUSHA COUNTIES

901--Advertisement

904--Notice to Bidders:	Governing Specs. - # 1
	Status of ROW, Utility Adjustments and Potentially Contaminated Sites - # 437, <u>W/Attachments</u>
	Agency, Commission and Officer Name Changes - # 882
	Additional Provisions For Guard Rail Construction - # 946
	Errata - # 1428
	Clarification of Significant Change Specs. - # 1991
	Use of Fly Ash in Non-Sulfate Areas - # 2904
	Use of GGBFS - # 2906
	Selection of Optional Items - # 3191
	Plant Pest Quarantines Information - # 3745
	Prompt Payment - # 4670
	Alterations in Bidding Process - # 4758
	Substitution of Cold Plastic Traffic Markings - # 4792
	On-the-Job Training Program - # 4954
	Change Order / Quantity Adjustment Name Change - # 5185
	Placement of Granular Material - # 5788
	Disadvantaged Business Enterprises - # 5955, <u>W/Supplements</u>
	DBE Goals - # 5957
	Work in Proximity of High Voltage Power Lines - # 6027
	Payment to Subcontractors - # 6143
	Contractor Overpayment(s) - # 6159
	Federal Bridge Formula - # 6275
	Certification of Traffic Control Devices - # 6289
	Submission of Form OCR-485 - # 6333
	Storm Water Discharge Associated W/Construction Activities (>5 Acres) - # 6484
	Removal of Construction Signs - #6522
	Submittal of Hydrated Lime Shipping Tickets - # 6618
	Fuel Tax Applicability to Bidders and Contractors - # 6783
	Estimated Monthly Quantities - # 6794
	Petroleum Products Base Price - # 6840
	Contract Time - # 6861
	Placement of Fill Material in Federally Regulated Areas - # 6864
	Specialty Items - # 6881

-CONTINUED ON NEXT PAGE-

**PAGE 2 - TABLE OF CONTENTS - IM-0055-03(076) / 103395 -
GRENADA & YALOBUSHA COUNTIES**

Current Traffic & Estimated Accumulated ESALs - # 6883
Cold Milling Material - # 6886

906:	Required Federal Contract Provisions -- FHWA-1273, <u>W/Supplement</u>
907-101-5:	Definitions
907-102-1:	Combination Bids
907-102-8:	Preparation of Proposal
907-103-5:	Execution and Approval of Contract
907-104-3:	Significant Changes in the Character of Work and Differing Site Conditions
907-104-8:	Partnering Process
907-104-12:	Minor Alterations to the Contract
907-105-9:	Claims
907-106-1:	Convict Produced Materials
907-107-6:	Materials Pits (NPDES Permits)
907-107-10:	Contractor's Responsibility for Work
907-107-12:	Liability Insurance
907-107-13:	Contractor's Protection Plan
907-108-20:	Liquidated Damages Table
907-108-25:	Determination and Extension of Contract Time
907-109-8:	Claims
907-109-14:	Measurement and Payment for changes in Cost of Construction Materials
907-109-15:	Measurement and Payment, <u>W/Supplement</u>
907-203-15:	Excavation and Embankment
907-225-2:	Grassing
907-234-1:	Silt Fence
907-401-23:	Hot Mix Asphalt (HMA) <u>W/Supplement</u>
907-403-17:	Maintained Hot Mix Asphalt (HMA), <u>W/Appendix</u>
907-403-18:	Hot Mix Asphalt (HMA)
907-423-4:	Ground-In Rumble Strips
907-606-7:	Terminal End Sections
907-618-16:	Placement of Temporary Traffic Stripe
907-619-18:	Temporary Pavement Markings
907-619-22:	Traffic Control for Construction Zones
907-619-24:	Changeable Message Signs
907-625-4:	Painted Traffic Markings
907-626-10:	Thermoplastic Markings
907-626-16:	Inverted Profiles Thermoplastic Traffic Stripe
907-627-3:	Raised Pavement Markings
907-628-11:	Cold Plastic Pavement Markings
907-700-4:	Buy America
907-700-5:	Use of Crushed Reclaimed Concrete Pavement in Asphalt

-CONTINUED ON NEXT PAGE-

**PAGE 3 - TABLE OF CONTENTS - IM-0055-03(076) / 103395 -
GRENADA & YALOBUSHA COUNTIES**

907-702-10:	Petroleum Asphalt Cement & Polymer Modified Petroleum Asphalt Cement\
907-703-18:	Aggregates for Hot Mix Asphalt (HMA)
907-710-5:	Fast Drying Acrylic Waterborne Traffic Paint
907-712-5:	Materials for Guardrail Posts
907-714-6:	Miscellaneous Materials
907-714-10:	Geotextiles
907-715-4:	Agricultural Limestone
907-716-1:	Miscellaneous Materials
907-720-3:	Preformed Pavement Markings for Construction Zones
907-720-11:	Glass Beads
907-720-12:	Reflective Pavement Markers/Adhesive for Pavement Markers
907-721-5:	Flexible Delineators
907-721-7:	Reflective Sheeting
907-721-8:	Materials For Signing
906-3:	Training Special Provision
906-4:	MDOT On-the-Job Training Program

SECTION 905 - PROPOSAL,
PROPOSAL SHEET NOS. 2-1 THRU 2-9,
COMBINATION BID PROPOSAL,
CERTIFICATE OF PERFORMANCE - PRIOR FEDERAL-AID CONTRACTS
CERTIFICATION REGARDING NON-COLLUSION, DEBARMENT & SUSPENSION
SECTION 902 - CONTRACT FORM, AND SECTION 903 - CONTRACT BOND FORM,
MAINTENANCE BOND,
OCR-485,
PROGRESS SCHEDULE,
HAUL PERMIT FOR BRIDGES WITH POSTED WEIGHT LIMITS.

REVISIONS TO THE ABOVE WILL BE INDICATED ON THE SECOND SHEET
OF SECTION 905 AS ADDENDA)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 901 - ADVERTISEMENT

Sealed bids will be received by the Mississippi Transportation Commission in the Office of the Contract Administration Engineer, Room 1013, Mississippi Department of Transportation Administration Building, 401 North West Street, Jackson, Mississippi, until 9:30 o'clock A.M., Tuesday, March 23, 2004; thereafter bids will be received in the First Floor Auditorium of the Mississippi Department of Transportation Administration Building, Jackson, Mississippi, until 10:00 o'clock A.M., Tuesday, March 23, 2004, and shortly thereafter publicly opened for

Clearing and Grubbing, Guardrail, Mill and Overlay approximately 14.4 miles of I-55, from 0.5 mile South of MS Hwy. 8 to 0.4 mile North of MS Hwy. 330, known as Federal Aid Project No. IM-0055-03(076) / 103395, in the Counties of Grenada and Yalobusha, State of Mississippi.

This Proposal contains Provisions for the Hot Mix Asphalt (HMA) to be Maintained by the Contractor for a Period of Seven (7) Years.

The attention of bidders is directed to the Contract Provisions governing selection and employment of labor. Minimum wage rates have been predetermined by the Secretary of Labor and are subject to Public Law 87-58 1, Work Hours Act of 1962, as set forth in the Contract Provisions.

The Mississippi Department of Transportation hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, sex, religion or national origin in consideration for an award.

The award of this contract will be contingent upon the Contractor satisfying the DBE requirements.

Bid proposals must be acquired from the MDOT Contract Administration Division, Room 1013, MDOT Administration Building, 401 North West Street, Jackson, Mississippi, 39201, Telephone (601) 359-7744 or FAX (601) 359-7940. These proposals are available at a cost of Ten Dollars (\$10.00) per proposal. Specimen proposals are also available at the MDOT Contract Administration Division at a cost of Ten Dollars (\$10.00) per proposal, or can be viewed or downloaded at no cost at www.gomdot.com.

Plans may be acquired on a cost per sheet basis from MDOT Plans Print Shop, Room 1100, MDOT Administration Building, 401 North West Street, Jackson, Mississippi, 39201, Telephone (601) 359-7460 or e-mail at plans@mdot.state.ms.us or FAX (601) 359-7461.

Plans will be shipped upon receipt of payment.

Bid bond, signed or countersigned by a Mississippi Resident Agent, with Power of Attorney attached or on file with the Contract Administration Engineer of the Department, a Cashier's check or Certified Check for five (5%) percent of bid, payable to STATE OF MISSISSIPPI, must accompany each proposal.

The attention of bidders is directed to the provisions of Subsection 102.07 pertaining to irregular proposals and rejection of bids.

LARRY L. "BUTCH" BROWN
EXECUTIVE DIRECTOR

(FAP)

MISSISSIPPI STATE HIGHWAY DEPARTMENT

SECTION 904 - NOTICE TO BIDDERS NO. 1

CODE: (IS)

DATE: 7/26/90

SUBJECT: Governing Specifications

The current (1990) Edition of the Standard Specifications for Road and Bridge Construction adopted by the Mississippi State Highway Commission is made a part hereof fully and completely as if it were attached hereto, except where superseded by special provisions, or amended by revisions of the Specifications contained herein. Copies of the specification book may be purchased from the Construction Division.

A reference in any contract document to controlling requirements in another portion of the contract documents shall be understood to apply equally to any revision or amendment thereof included in the contract.

In the event the plans or proposal contain references to the 1976 Edition of the Standard Specifications for Road and Bridge Construction, it is to be understood that such references shall mean the comparable provisions of the 1990 Edition of the Standard Specifications.

MISSISSIPPI STATE HIGHWAY DEPARTMENT

SECTION 904 - NOTICE TO BIDDERS NO. 437

CODE: (IS)

DATE: 6/6/91

SUBJECT: Status of Right-of-Way, Utility Adjustments and Potentially Contaminated Sites

Although it is desirable to have acquired all rights-of-way and completed all utility adjustments and work to be performed by others prior to receipt of bids, it is not considered to be in the public interest to wait until each and every such clearance has been obtained. The bidder is hereby advised of unacquired rights-of-way, relocatees and utilities which have not been completed.

The status of right-of-way and utility adjustments and potentially contaminated sites are set forth in attachments entitled "Status of Right-of-Way", "Status of Utility Adjustments" and "Status of Potentially Contaminated Sites."

In the event right of entry is not available to ALL parcels of right-of-way and all work complete that is to be accomplished by others on the date set forth in the contract for the Notice to Proceed, the Department will issue a restricted Notice to Proceed upon written request of the Contractor.

STATUS OF RIGHT OF WAY

IM-0055-03(076)

103395\301000

103395\302000

GRENADA COUNTY

YALOBUSHA COUNTY

I-55

All right of way has been acquired and legal right of entry has been obtained and possession has been obtained **except** as indicated on the following files:

NONE.

ASBESTOS CONTAMINATION STATUS OF BUILDINGS
TO BE REMOVED BY THE CONTRACTOR

IM-0055-03(076)

103395/30200

YALOBUSHA COUNTY

January 29, 2004

Reference is made to notices to bidders entitled "Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP)" and "Removal of Obstructions".

The following pertinent information is furnished concerning asbestos containing materials (ACMs), if any, found in buildings to be removed by the Contractor.

This project is for overlay within existing Right of Way. There are no buildings in the contract to be removed.

ASBESTOS CONTAMINATION STATUS OF BUILDINGS
TO BE REMOVED BY THE CONTRACTOR

IM-0055-03(076)

103395/301000

GRENADA COUNTY

January 29, 2004

Reference is made to notices to bidders entitled "Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP)" and "Removal of Obstructions".

The following pertinent information is furnished concerning asbestos containing materials (ACMs), if any, found in buildings to be removed by the Contractor.

This project is for overlay within existing Right of Way. There are no buildings in the contract to be removed.

STATUS OF POTENTIALLY CONTAMINATED SITES

IM-0055-03(076)

103395/30200

YALOBUSHA COUNTY

January 29, 2004

THIS PROJECT IS FOR OVERLAY WITHIN EXISTING RIGHT OF WAY AND NO INITIAL SITE ASSESSMENT WILL BE PERFORMED. ANY CONTAMINATION DISCOVERED ON EXISTING RIGHT OF WAY WILL BE HANDLED BY THE DEPARTMENT.

STATUS OF POTENTIALLY CONTAMINATED SITES

IM-0055-03(076)

103395/301000

GRENADA COUNTY

January 29, 2004

THIS PROJECT IS FOR OVERLAY WITHIN EXISTING RIGHT OF WAY AND NO INITIAL SITE ASSESSMENT WILL BE PERFORMED. ANY CONTAMINATION DISCOVERED ON EXISTING RIGHT OF WAY WILL BE HANDLED BY THE DEPARTMENT.

UTILITY STATUS REPORT
IM-0055-03(076) / 103395
GRENADA & YALOBUSHA COUNTIES
FEBRUARY 2, 2004

This is to certify that there are no known utility conflicts associated with the above referenced project.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 882

CODE: (IS)

DATE: 7/1/92

SUBJECT: AGENCY, COMMISSION AND OFFICER NAME CHANGES

Whenever the term "Mississippi State Highway Department", the word "Department", or variations thereof meaning the Mississippi State Highway Department appears in the plans, proposal, contract documents, and specifications for highway construction projects, in accordance with the laws of the State of Mississippi, it shall mean the "Mississippi Department of Transportation."

Whenever the term "Mississippi State Highway Commission", the word "Commission", or variations thereof meaning the Mississippi State Highway Commission appears in the plans, proposal, contract documents, and specifications for highway construction projects, in accordance with the laws of the State of Mississippi, it shall mean the "Mississippi Transportation Commission."

Whenever the term "Director", or variations thereof meaning the Chief Administrative Officer of the State Highway Department appears in the plans, proposal, contract documents, and specifications for highway construction projects, in accordance with the laws of the State of Mississippi, it shall mean the "Executive Director of the Mississippi Department of Transportation."

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 946

CODE: (SP)

DATE: 7/24/92

SUBJECT: Additional Provisions for Guard Rail Construction

On any facilities opened to traffic, the Contractor shall not begin work on any section of guardrail until preparations have been made to complete the installation of the section, including posts, rail, anchors, and hardware as a continuous operation. Once work has been initiated on a section, the work shall be prosecuted to its completion unless inclement weather or other conditions beyond the control of the Contractor interfere with the work. Uncompleted guardrail or special end sections shall not be left exposed to the travelling public without the approval of the Engineer. If approval is granted, the uncompleted section must satisfactorily be marked with drums, barricades, or other devices, as directed by the Engineer, at no additional cost to the Department. In no case will uncompleted guardrail or special end sections be allowed to remain over a weekend or holiday period.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1428

CODE: (IS)

DATE: 6/18/93

SUBJECT: ERRATA AND MODIFICATIONS TO 1990 STANDARD SPECIFICATIONS BOOK

<u>Page</u>	<u>Subsection</u>	<u>Change</u>
101-2	101.01	Change the abbreviation for Military Specifications from "MS" to "MIL".
101-2	101.01	After OD (Outside Diameter) add "OSHA" as the abbreviation for "Occupational Safety and Health Administration".
101-4	101.02	After the word "specifications," in the second line of the second paragraph under the definition for Contract add "supplemental specifications, ".
101-5	101.02	In the definition for County delete the word "specified".
105-2	105.03	In the fourth line of the last paragraph change "release" to "relieve".
105-10	105.16	In the second line of this page change "grass" to "plant establishment".
107-21	107.25	In the third line of the fourth paragraph change "until" to "unit".
108-9	108.06.2	In the last two lines of the sixth full paragraph delete "or when the number is greater than 1.0, the assessment is assigned as 1.0".
218-1	218.03.2	In the second line of third paragraph change "uniformly" to "uniformly".
405-8	405.03.3.2.2	In the first line change "crack" to "cracks".
405-8	405.03.3.2.2	In the first line change "then" to "than".
405-9	405.03.3.3.1	In the last line of the second paragraph add "shall" after the word "aggregate".
405-9	405.03.3.3.1	In the third line of the third paragraph change "Contract" to "Contractor".
405-10	405.03.4	In the last line of the first paragraph change "enterlayer" to "innerlayer".

<u>Page</u>	<u>Subsection</u>	<u>Change</u>
405-10	405.04	In the second line of the first paragraph change "ploymer" to "polymer".
405-10	405.04	In the last line of the third paragraph change reference "109.08" to "907-109.08".
408-1	408.04	In the first line change "Measurment" to "Measurement".
603-9	603.03.9.3	In the third line of the last paragraph of this subsection change "directd" to "directed".
603-10	603.05	In the description for pay item 603-C-F change "Sections" to "Section".
603-12	603.05	In the description for pay item 603-P-A delete the second "Box Culvert".
604-1	604.02	Change subsection reference for gray iron castings from "716.03" to "716.04".
615-1	615.03.2	In the eighth line change "placement" to "replacing,".
618-2	618.03.1	In the sixth line of the fourth paragraph change "walkaways" to "walkways".
618-2	618.03.1	In the seventh line of the fourth paragraph change the second "a" to "at".
626-3	626.05	Remove 4" from in front of Thermoplastic in description of pay item 626-G.
628-2	628.05	Add "linear foot" as a unit of measurement for payment under pay item 628-E.
630-6	630.03.8.1	In the last line of the first paragraph change the references from "810.03.6 and 810.03.7" to "810.03.5 and 810.03.6", respectively.
630-6	630.03.8.1	In the last line of the second paragraph change "shown" to "specified".
630-7	630.03.8.2	In the second line of the first paragraph change reference "810.03.2" to "810.02.2".
699-2	699.04	In the fourth line of the first paragraph change "included" to "include".
702-7	702.12	In the title for TABLE III change "EA-I" to "EA-1".
711-1	711.02.1	In the table for areas and weights of Standard Reinforcing Bars change the weight-lbs. per foot of number 5 bar from "1.048" to "1.043".

<u>Page</u>	<u>Subsection</u>	<u>Change</u>
712-1	712.04	In the third line of the second paragraph change "Class B" to "Class D".
712-1	712.04	In the fifth line of the second paragraph change "Class A" to "Class C".
712-8	712.12.5	In the third line change the ASTM designation from "A 120" to "F 1083".
714-13	714.11.7	Change the Subsection No. "714-11.7.1" to "714.11.7.1".
715-7	715.09.3	In the fifth line from the bottom of the page change the lbs./sq.yd. minimum dry wt. requirement for straw from "0.70" to "0.5".
716-2	716.11	In the second line change the ASTM designation from "A 120" to "A 53".
717-8	--	Change the Section No. shown in the upper left corner of the page from "7171" to "717".
721-3	721.03.3	In lines 5 and 7 of this subsection add "B 221, B 241, or" in front of B 429.
803-10	803.03.9.6	Revise the definition of the letter "S" in the pile formulas to read: "S = the average penetration in inches per blow for the last 5 to 10 blows for gravity hammers and the last 10 to 20 blows for steam/air hammers."
804-37	804.03.19.6.3	In the fourth line of the first paragraph change "otherwise" to "otherwise".
820-2	820.03.4.1	In the second line of this subsection change "with out" to "without".
820-2	820.03.4.3	In the second line of this subsection change "abraisions" to "abrasions".
1	Index	Change reference subsection for Advance on Materials from "109.02" to "109.06.2".
5	Index	Change reference subsection for Cofferdams and Cribs from "810.03.4" to "801.03.4".
28	Index	Delete the listing "Working Day, Definition of 101.02" contained in the third line from the bottom of the page.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1991

CODE: (IS)

DATE: 5/11/94

SUBJECT: Clarification of Significant Change Specifications

Before any consideration will be given for an adjustment to the contract as noted in the first paragraph of Subsection 907-104.02.1, it must be determined that a significant change in the character of the work has occurred. A Significant change in quantity of a major item [plus or minus twenty-five percent (25%) variation from original quantity], in and of itself, does not constitute a significant change in the character of work. The character of the work, as altered, has to differ materially in kind or nature from that involved or included in the original proposed construction.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2904

CODE: (IS)

DATE: 10/4/95

**SUBJECT: USE OF FLY ASH OR BLENDED HYDRAULIC CEMENT
(TYPE IP) IN NON-SULFATE AREAS**

All references to the term "Portland Cement Concrete" in the Mississippi Standard Specifications for Road and Bridge Construction, contract plans and documents, and the Department's Standard Operating Procedures shall be deemed to mean a concrete mixture composed of cementitious materials, water, fine and coarse aggregates, and admixtures when specified or permitted.

At the Contractor's option, the cementitious materials may be portland cement (Type I or II), portland cement (Type III when permitted), blended hydraulic cement (Type IP), portland cement combined with ground granulated blast furnace slag or portland cement combined with fly ash.

The addition of fly ash as a replacement for cement will not be permitted in blended hydraulic cement (Type IP), portland cement combined with ground granulated blast furnace slag or portland cement (Type III) when specified in the contract.

The replacement of portland cement with fly ash shall not exceed 20 percent and the replacement rate (by weight) shall be one part fly ash for one part cement. The scales for weighing fly ash shall meet the requirements of cement scales as set forth in Subsection 501.03.2.3.

When blended hydraulic cement (Type IP) is incorporated in the work or when portland cement is replaced with ground granulated blast furnace slag or fly ash, cylinder tests shall be used as a guide for the removal of falsework and forms as set forth in Column B of Subsections 601.03.6.3 and 804.03.15; and concrete pavement shall not be opened to traffic until cylinder tests have attained a compressive strength of 3500 psi or may be opened after a curing period of 28 days.

In addition to meeting the requirements set forth in Subsection 714.05, the source of fly ash must have been approved for listing in the Department's "List of Approved Sources of Fly Ash for Concrete Mixtures in Non-Sulfate Areas" prior to its use.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2906

CODE: (IS)

DATE: 10/4/95

SUBJECT: Use of Ground Granulated Blast Furnace Slag (GGBFS)

Subject to the conditions set forth herein and at the Contractor's option, GGBFS may be used as a replacement for portland cement as the cementitious material in concrete mixtures and in cement-soil or cement-soil-aggregate mixtures. The replacement of portland cement with GGBFS shall not exceed 50 percent by weight of the total cementitious material and the replacement rate (by weight) shall be one part GGBFS for one part portland cement. Only one mineral admixture will be allowed for portland cement replacement in any mixture.

The addition of GGBFS as a replacement for portland cement will not be permitted in blended hydraulic cement, portland cement combined with fly ash or portland cement (Type III), when specified in the contract.

In addition to meeting the requirements set forth in Subsection 907-714.06, the source of GGBFS must have been approved for listing in the Department's "List of Approved Suppliers of Grade 120 - Ground Granulated Blast-Furnace Slag".

Concrete mixtures containing portland cement combined with GGBFS shall not be mixed or used alternately with concrete mixtures containing other cementitious materials in any structure or part thereof that, in its permanent position, will be visible above the ground.

When GGBFS is proposed to be used in concrete mixtures, the Contractor shall furnish the concrete mixture design with documentation of performance characteristics (based on trial batching or plant produced mixtures) to the Engineer for review prior to use. The approval of the mixture design will be based on verification of performance at the beginning of production.

When GGBFS is used for replacement of portland cement in concrete mixtures, cylinder tests shall be used as a guide for the removal of falsework and forms as set forth in Column B of Subsections 601.03.6.3 and 804.03.15 and concrete pavement shall not be opened to traffic until cylinder tests have attained a compressive strength of 3500 psi or may be opened after a curing period of 28 days.

Scales for weighing GGBFS shall meet the requirements of cement scales as set forth in Subsection 501.03.2.3.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 3191

CODE: (IS)

DATE: 4/08/96

SUBJECT: Selection of Optional Items

Bidders are hereby advised that, because of a change by the Department in classifying "Optional" items, the bid schedule for this project lists as "Optional" items that formally have been listed as "Alternate".

The summary of quantities sheet(s) in construction plans printed prior to the effective date of this change may list as "Alternate" items that are listed as "Optional" in the bid proposal.

When this contradiction occurs, the listing in the bid schedule is correct and bidders are to disregard the contradicting listing on the summary of quantities sheet(s) in the construction plans.

Bidders should pay close attention to the items classified in the bid schedule as "Optional" items.

With the change by the Department in classifying optional items, a change will be required of the Contractor in the selection of optional items. (Refer to 907-101-2, 907-102-4 and Section 905)

WHEN THE BID SCHEDULE LISTS OPTIONAL ITEMS, THE CONTRACTOR'S SELECTION MAY, BUT IS NOT REQUIRED TO, BE MADE AT THE TIME OF BIDDING. FOR OPTIONAL ITEMS NOT PRE-SELECTED, THE CONTRACTOR'S SELECTION SHALL BE MADE PRIOR TO OR AT THE TIME OF EXECUTION OF THE CONTRACT.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 3745

CODE: (IS)

DATE: 3/31/97

SUBJECT: Plant Pest Quarantines Information

AT THE REQUEST OF THE U. S. DEPARTMENT OF AGRICULTURE, PLANT PEST CONTROL INFORMATION CONCERNING DOMESTIC QUARANTINES IS CITED AS FOLLOWS:

The entire state of Mississippi has been quarantined for the Imported Fire Ants. Soil and soil-moving equipment operating in the state will be subject to plant quarantine regulations. In general, these regulations provide for cleaning soil from equipment before it is moved from the state. Complete information may be secured from the State of Mississippi Department of Agriculture and Commerce, Bureau of Plant Industry, P. O. Box 5207, Mississippi State, Mississippi 39762-5207 -- Telephone 325-3390.

IMPORTED FIRE ANT QUARANTINES

THE FOLLOWING REGULATED ARTICLES REQUIRE A CERTIFICATE OR PERMIT FOR MOVEMENT:

1. Soil, separately or with other things, except soil samples shipped to approved laboratories*. Potting soil is exempt, if commercially prepared, packaged and shipped in original containers.
2. Plants with roots with soil attached, except houseplants maintained indoors and not for sale.
3. Grass sod.
4. Baled hay and straw that have been stored in contact with the soil.
5. Used soil-moving equipment.
6. Any other products, articles, or means of conveyance of any character whatsoever not covered by the above, when it is determined by an inspector that they present a hazard of spread of the imported fire ant and the person in possession thereof has been so notified.

* Information as to designated laboratories, facilities, gins, oil mills, and processing plants may be obtained from an inspector.

Imported Fire Ant Quarantines



Conditions of Movement.

Counties entirely colored are completely regulated; Counties partially colored are partially regulated.



Regulated Area.

Restrictions are imposed on the movement of regulated articles as follows:
From colored areas into or through white areas.

Consult your State or Federal plant protection inspector or your County Agent for assistance regarding exact areas under regulation and requirements for moving regulated articles. For detailed information, see 7 CFR 301.81 for quarantine and regulations.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 4670

CODE: (IS)

DATE: 9/30/99

SUBJECT: Prompt Payment

Bidders are hereby advised that the Prime Contractor must pay their subcontractor(s) for satisfactory performance of their contracts no later than a specific number of days from receipt of payment from the Department.

Therefore, Prime Contractors are hereby advised of the following:

- (a) Within 15 calendar days after receiving payment from the Department for work satisfactorily performed, the Prime Contractor shall make prompt payment to all sub-contractors or material suppliers for all monies due.
- (b) Within 15 calendar days after receiving payment from the Department for work satisfactorily completed, the Prime Contractor shall promptly return all retainage monies due to all sub-contractors or material suppliers.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 4758

CODE: (IS)

DATE: 6/11/99

SUBJECT: Alterations In Bidding Process

Bidders are hereby advised that they may either use the traditional method of entering their bid information by hand on Section 905--Proposal, or may insert printed information obtained from the available Electronic Bid System (EBS).

It is the responsibility of every bidder to check for any addendum or modification to the contract document(s) for which they intend to submit a response. It shall be the bidder's responsibility to be sure they are in receipt of all addenda, pre-bid conference information, and/or questions and answers provided at, or subsequent to, the pre-bid conference, if any are issued.

The Mississippi Transportation Commission assumes no responsibility for defects, irregularities or other problems caused by the use of electronic media. Operation of this electronic media is done at the sole risk of the user.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 4792

CODE: (IS)

DATE: 5/02/2001

SUBJECT: Substitution of Cold Plastic Traffic Markings

Bidders are hereby advised that, at their option, cold plastic traffic markings may be used in lieu of hot applied thermoplastic markings. Substitution will only be allowed for pay items 907-626-AA through HH. Substituted cold plastic markings shall be of the same color and width as that required for the hot applied stripe. Unless otherwise specified, the markings, whether hot applied or cold plastic, shall be of the same type material for the entire project. Material and construction requirements for substituted cold plastic traffic markings shall meet the requirements of Section 628 of the Standard Specifications or as amended by special provision. The layout and spacing for substituted cold plastic traffic markings will remain as shown in the plans, or in the contract documents, for hot applied thermoplastic markings. Measurement of substituted cold plastic traffic markings shall be made in accordance with Section 628 of the Standard Specifications or as amended by special provision. Payment for substituted cold plastic traffic markings shall be made at the unit price bid for the appropriate hot applied thermoplastic marking.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 4954

CODE: (IS)

DATE: 4/4/2000

SUBJECT: ON-THE-JOB TRAINING PROGRAM

Bidders are hereby advised that the Department's policy for administering On-The-Job Training has been changed. Affective in the March 2000 letting, payment for training hours will be handled as outlined in Special Provision 906-4. A pay item for trainees will no longer be included in individual construction projects. Payment for training individuals will be processed in accordance with the conditions in MDOT's ON-THE-JOB TRAINING PROGRAM (Special Provision 906-4).

On Federal-Aid projects, failure on the part of the Contractor to carryout the terms of the Alternate Training Special Provision (Special Provision 906-4) will be considered grounds to preclude the Contractor from participating in the Alternate On-The-Job Training Program. In the event the Department is required to preclude the Contractor from participating in the program, the Contractor will be required to adhere to the requirements of the Training Special Provision (Special Provision 906-3), for which purpose the special provision is also made a part of this proposal.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 5185

CODE: (IS)

DATE: 9/29/2000

SUBJECT: Change Order / Quantity Adjustment Name Change

Whenever the term "Change Order" appears in the plans, proposal, contract documents, and specifications for highway construction projects, it shall mean "Quantity Adjustment."

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 5788

CODE: (SP)

DATE: 9/13/2001

SUBJECT: Placement Of Granular Material

The Contractor shall be required to place granular material on the shoulders at any time a differential of two and one-quarter ($2\frac{1}{4}$) inches or more exists between the present pavement edge and the shoulder grade. This condition may exist prior to any preliminary leveling, after the placement of the preliminary leveling, after the placement of the surface course. In any event, whenever or wherever, a $2\frac{1}{4}$ -inch differential exists between the pavement edge and the shoulder material, this condition shall be corrected by the placement of the shoulder material to correct the differential.

SUPPLEMENT TO NOTICE TO BIDDERS NO. 5955

DATE: 12/10/2001

The goal is 3 percent for the Disadvantaged Business Enterprise.

The bidder's execution of the signature portion of the proposal shall constitute execution of the following assurance:

The bidder hereby gives assurance pursuant to the applicable requirements of "Transportation Equity Act for the 21st Century -- TEA-21" and "Part 26, Title 49, Code of Federal Regulation" that the bidder has made a good faith effort to meet the contract goal for DBE participation for which this proposal is submitted.

A pre-bid meeting will be held in the first floor auditorium of the Mississippi Department of Transportation Administration Building, 405 North West Street, Jackson, Mississippi at 2:00 P.M. on the day preceding the date of the bid opening.

This meeting is to inform DBE firms of subcontracting and material supply opportunities. Attendance at this meeting is considered of prime importance in demonstrating good faith effort to meet the contract goal.

SUPPLEMENT TO NOTICE TO BIDDERS NO. 5955

DATE: 10/10/2002

Delete subparagraph (3) on page 5 under the heading AWARD, and substitute the following:

- (3) Bidder must submit **with the bid proposal** a list of all firms that submitted quotes for material supplies or items to be subcontracted. This information must be submitted on form OCR-485 in the back of the contract proposal.

Delete the first sentence of subparagraph (2) on page 6 under the heading DBE REPORTS, and substitute the following:

At the conclusion of the project the Contractor will submit to the Project Engineer for verification of quantities and further handling Form OCR-482 whereby the Contractor certifies to the amounts of payments made to each Contractor/Supplier.

Delete subparagraph (5) on page 6 under the heading DBE REPORTS, and substitute the following:

- (5) OCR-485: The bidder must submit **with the bid proposal** a list of all firms that submitted quotes for material supplies or items to be subcontracted.
- (6) OCR-487: Only used by Prime Contractors that are certified DBE firms. This form is used in determining the exact percentage of DBE credit for the specified project. It should be returned to MDOT with the OCR-481 form, or can also be returned with the Permission to Subcontract forms (CAD -720 or CAD-725).

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 5955

CODE: (IS)

DATE: 12/10/2001

**SUBJECT: DISADVANTAGED BUSINESS ENTERPRISES IN FEDERAL-AID
HIGHWAY CONSTRUCTION**

This contract is subject to the "Transportation Equity act for the 21st Century -- TEA-21" and applicable requirements of "Part 26, Title 49, Code of Federal Regulations." Portions of the Act are set forth in this Notice as applicable to compliance by the Contractor and all of the Act, and the MDOT DBE Program, is incorporated by reference herein.

The Department has developed a Disadvantaged Business Enterprise Program that is applicable to this contract and is made a part thereof by reference.

Copies of the program may be obtained from:

Office of Civil Rights
Mississippi Department of Transportation
P. O. Box 1850
Jackson, Mississippi 39215-1850

POLICY

It is the policy of the Mississippi Department of Transportation to provide a level playing field, to foster equal opportunity in all federally assisted contracts, to improve the flexibility of the DBE Program, to reduce the burdens on small businesses, and to achieve that amount of participation that would be obtained in a non-discriminatory market place. In doing so, it is the policy of MDOT that there will be no discrimination in the award and performance of federally assisted contracts on the basis of race, color, sex, age, religion, national origin, or any handicap.

ASSURANCES THAT CONTRACTORS MUST TAKE:

MDOT will require that each contract which MDOT signs with a subrecipient or a contractor (and each subcontract the prime contractor signs with a subcontractor) includes the following assurances:

"The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR 26 in the award and administration of federally assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as MDOT deems appropriate."

DEFINITIONS

For purposes of this provision the following definitions will apply:

"Disadvantaged Business" means a small business concern: (a) which is at least 51 percent owned by one or more socially and economically disadvantaged individual(s) or in the case of

any publicly owned business, at least 51 percent of the stock of which is owned by one or more socially and economically disadvantaged individual(s); and (b) whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individual(s) who own it. It is important to note that the business owners themselves must control the operations of the business. Absentee ownership or title ownership by an individual who does not take an active role in controlling the business is not consistent with eligibility as a DBE under CFR 49 Part 26.71.

CONTRACTOR'S OBLIGATION

The Contractor and all subcontractors shall take all necessary and reasonable steps to ensure that DBE firms can compete for and participate in the performance of a portion of the work in this contract and shall not discriminate on the basis of race, color, national origin, religion or sex. Failure on the part of the Contractor to carry out the DBE requirements of this contract constitutes a breach of contract and after proper notification the Department may terminate the contract or take other appropriate action as determined by the Department.

When a contract requires a zero percent (0%) DBE goal, the Contractor still has the responsibility to take all necessary and reasonable steps to ensure that DBE firms can compete for and participate in the performance of the work in the contract. All work performed by a certified DBE firm is considered to be a “race neutral” measure and the Department will receive DBE credit towards the overall State goals when the DBE firm is paid for their work. If the Prime Contractor is a certified DBE firm, the Department can receive DBE credit only for the work performed by the Prime Contractor’s work force or any work subcontracted to another DBE firm. Work performance by a non-DBE subcontractor is not eligible for DBE credit. DBE credit is received when the DBE firm is paid.

CONTRACT GOAL

The goal for participation by DBEs is established for this contract in the attached Supplement. The Contractor shall exercise all necessary and reasonable steps to ensure that participation is equal to or exceeds the contract goal.

The percentage of the contract that is proposed for DBEs shall be so stated on the last bid sheet of the proposal.

The apparent lowest responsive bidder shall submit to the Contract Administration Division [OCR](#) Form 481, signed by the Prime Contractor and the DBE Subcontractors, no later than the 10th day after opening of the bids.

FORMS ARE AVAILABLE FROM THE CONTRACT ADMINISTRATION DIVISION

The [OCR-481](#) Form must contain the following information:

The name and address of each certified DBE Contractor / supplier;

The Reference Number, percent of work and the dollar amount of each item. If a portion of an item is subcontracted, a breakdown of that item (including quantities and unit price) must be attached, detailing what part of the item the DBE firm is to perform and who will perform the remainder of the item.

If the DBE Commitment shown on the last bid sheet of the proposal, does not equal or exceed the contract goal, the bidder must submit, with the proposal, information to satisfy the Department that adequate good faith efforts have been made to meet the contract goal.

Failure of the lowest bidder to furnish acceptable proof of good faith efforts, submitted with the bid proposal, shall be just cause for rejection of the proposal. Award may then be made to the next lowest responsive bidder or the work may be readvertised.

The following factors are illustrative of matters the Department will consider in judging whether or not the bidder has made adequate good faith effort to satisfy the contract goal.

- (1) Whether the bidder attended the pre-bid meeting that was scheduled by the Department to inform DBEs of subcontracting opportunities;
- (2) whether the bidder advertised in general circulation, trade association, and minority-focus media concerning the subcontracting opportunities;
- (3) whether the bidder provided written notice to a reasonable number of specific DBEs that their interest in the contract is being solicited;
- (4) whether the bidder followed up initial solicitations of interest by contacting DBEs to determine with certainty whether they were interested;
- (5) whether the bidder selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the contract goal;
- (6) whether the bidder provided interested DBEs with adequate information about the plans, specifications and requirements of the contract;
- (7) whether the bidder negotiated in good faith with interested DBEs and did not reject them as unqualified without sound reasons based on a thorough investigation of their capabilities; and
- (8) whether the bidder made efforts to assist interested DBEs in obtaining any required bonding or insurance.

DIRECTORY

Included with this Bid Proposal is a list of "Certified DBE Contractors" which have been certified as such by the Mississippi Department of Transportation.

To count toward meeting the goal, the DBE firm must be on the Department's list of "Certified DBE Contractors" that is attached to this proposal. DBE credit is received only when the DBE firm has been paid for the work they performed on the project.

REPLACEMENT

If a DBE Subcontractor cannot perform satisfactorily, and this causes the [OCR-481](#) commitment to fall below the contract goal, the Contractor shall take all necessary reasonable steps to replace the DBE with another certified DBE Subcontractor or submit information to satisfy the Mississippi Department of Transportation that adequate good faith efforts have been made to replace the DBE. All DBE replacements must be approved by the Department.

Under no circumstances shall the prime or any subcontractor perform the DBE's work (as shown on the [OCR-481](#)) without prior written approval from the Department. See "Sanctions" on Page 6 for penalties for performing DBE's work.

When a Contractor proposes to substitute/replace/terminate a DBE that was originally named on the [OCR-481](#), the Contractor must obtain a release (in writing) from the named DBE explaining why the DBE Subcontractor cannot perform the work. A copy of the original DBE's release must be attached to the Contractor's written request to substitute/replace/terminate along with appropriate Subcontract Forms for the substitute/replacement/terminated Subcontractor, all of which must be submitted to the DBE Coordinator and approved, in advance, by MDOT.

GOOD FAITH EFFORTS

To demonstrate good faith efforts to replace any DBE that is unable to perform successfully, the Contractor must document steps taken to subcontract with another certified DBE Contractor. Such documentation shall include no less than the following:

- (a) Proof of written notification to certified DBE Contractors by certified mail that their interest is solicited in subcontracting the work defaulted by the previous DBE or in subcontracting other items of work in the contract.
- (b) Efforts to negotiate with certified DBE Contractors for specific items shall include as a minimum:
 - (1) The name, address, and telephone number of each DBE contacted;
 - (2) A description of the information provided about the plans and specifications for those portions of the work to be subcontracted; and
 - (3) A statement of why agreements were not reached.
- (c) For each DBE contacted that was rejected as unqualified, the reasons for such conclusion.
- (d) Efforts made to assist each DBE that needed assistance in obtaining bonding or insurance required by the Contractor.

Failure of the Contractor to demonstrate good faith efforts to replace a DBE Subcontractor that cannot perform as intended with another DBE Subcontractor, when required, shall be a breach of contract and may be just cause to be disqualified from further bidding for a period of up to 12 months after notification by certified mail.

PARTICIPATION / DBE CREDIT

Participation shall be counted toward meeting the goal in this contract as follows:

- (1) If the Prime Contractor is a certified DBE firm, only the value of the work actually performed by the DBE Prime can be counted towards the project goal, along with any work subcontracted to a certified DBE firm.
- (2) If the Contractor is not a DBE, the work subcontracted to a certified DBE Contractor will be counted toward the goal.

- (3) The Contractor may count toward the goal a portion of the total dollar value of a contract with a joint venture eligible under the standards of this provision equal to the percentage of the DBE partner in the joint venture. The joint venturer must submit a Joint Venture Eligibility Form provided by the Mississippi Department of Transportation.
- (4) Expenditures to DBEs that perform a commercially useful function may be counted toward the goal. A business is considered to perform a commercially useful function when it is responsible for the execution of a distinct element of the work and carries out its responsibilities by actually performing, managing, and supervising the work involved.
- (5) The Contractor may count 100% of the expenditures for materials and supplies obtained from certified DBE suppliers and manufacturers that produce goods from raw materials or substantially alters them for resale provided the suppliers and manufacturers assume the actual and contractual responsibility for the provision of the materials and supplies. The Contractor may count 60 percent of the expenditures to suppliers that are not manufacturers, provided the supplier performs a commercially useful function in the supply process. Within 30 days after receipt of the materials, the Contractor shall furnish to the DBE Coordinator invoices from the certified supplier to verify the DBE goal.
- (6) Any work that a certified DBE firm subcontracts or sub-subcontracts to a non-DBE firm will not count towards the DBE goal.
- (7) Only the dollars actually paid to the DBE firm may be counted towards the DBE goal.

AWARD

Award of this contract to the low bidder will be contingent upon the following conditions:

- (1) Concurrence from Federal Highway Administration, when applicable.
- (2) Bidder must submit to the Contract Administration Division for approval, Form [OCR-481](#) (DBE Commitment) no later than the 10th day after opening of the bids, or submit information with the bid proposal to satisfy the Department and that adequate good faith efforts have been made to meet the contract goal.
- (3) Bidder must submit to Contract Administration Division a list of all firms that submitted quotes for material supplies or items to be subcontracted no later than 10 days after opening of the bids. This information must be submitted on form [OCR-485](#).

Prior to the start of any work, the bidder must notify the Project Engineer, in writing, of the name of the designated "DBE Liaison Officer" for this project. This notification must be posted on the bulletin board at the project site.

DEFAULT

In the event the Contractor defaults on this project and the Surety Company is called upon to complete the contract, the DBEs named on the original [OCR-481](#) Forms must be given the opportunity to perform the work subcontracted to them by the original contractor unless the DBE requests, in writing, to be released. The DBE commitment percentage entered on the last bid sheet of the proposal shall remain in force as a provision of the contract, but only the contract goal established by MDOT in this proposal must be met or exceeded to fulfill the

terms of the contract. The Contractor may list DBE Subcontractors and items that exceed MDOT's contract goal, but should unforeseen problems arise that would prevent a DBE from completing its total commitment percentage, the Contractor will meet the terms of the contract as long as it meets or exceeds MDOT's Contract Goal. For additional information, refer to "Replacement" section of this Notice.

DBE REPORTS

- (1) **OCR-481:** Refer to "CONTRACT GOAL" section on page no. 2 of this Notice to Bidders for information regarding this form.
- (2) **OCR-482:** At the conclusion of the project the Contractor will submit to the Project Engineer for verification of quantities and further handling Form **OCR-482** whereby the Contractor certifies to the amounts of payments made to each DBE Contractor/Supplier to satisfy the contract goal. The Project Engineer shall submit the completed Form **OCR-482** to the DBE Coordinator (**Office of Civil Rights**). Final acceptance of the project is dependent upon Contract Administration Division's receipt of completed Form **OCR-482** which they will receive from the Office of Civil Rights.
- (3) **OCR-483:** The Project Engineer/Inspector will complete Form **OCR-483**, the Commercially Useful Function (CUF) Performance Report, in accordance with MDOT S.O.P. No. **OCR-03-09-01-483**. Evaluations reported on this form are used to determine whether or not the DBE firm is performing a CUF. The Prime Contractor should take corrective action when the report contains any negative evaluations. DBE credit may be disallowed and/or other sanctions imposed if it is determined the DBE firm is not performing a CUF. **This form should also be completed and returned to the DBE Coordinator (Office of Civil Rights).**
- (4) **OCR-484:** Each month, the Contractor will submit to the Project Engineer **OCR-484** certifying payments to all subcontractors.
- (5) **OCR-485:** The Contractor (apparent low bidder) will submit to Contract Administration Division within 10 days from the opening of the bids, a list of all firms that submitted quotes for material supplies or items to be subcontracted.

SANCTIONS

The Department has the option to enforce any of the following penalties for failure of the prime Contractor to fulfill the DBE goal as stated on the **OCR-481** Form or any violations of the DBE program guidelines:

- (1) Disallow credit towards the DBE goal
- (2) Withhold progress estimate payments
- (3) Deduct from the final estimate an amount equal to the unmet portion of the DBE goal
- (4) Recover an amount equal to the unmet contract goal
- (5) Debar the Contractor involved from bidding on Mississippi Department of Transportation projects.

(6) Deduct from the Contractor's final estimate all or any combination of the following.

<u>Offense</u>	<u>Percentage of the monetary amount disallowed from (1) above</u>	<u>Lump Sum</u>
# 1	10%	\$ 5,000 or both
# 2	20%	\$ 10,000 or both
# 3	40%	\$ 20,000 & debarment

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| **SECTION 904 - NOTICE TO BIDDERS NO. 5957**

CODE: (IS)

| **DATE: 12/10/2001**

SUBJECT: DBE Goals

Bidders are hereby advised that the participation of a DBE Firm can not be counted towards the Prime Contractor's DBE goal until the amount being counted towards the goal has been paid to the DBE.

| Form [OCR-484](#) has been developed to comply with this requirement. Prime Contractors will submit this form to the Project Engineer no later than the 20th of each month. This form should be submitted monthly showing all firms even if the Contractor has paid no monies to the firm during that estimate period (negative report). The Project Engineer will attach this form to the monthly estimate before forwarding the estimate to the Contract Administration Division for processing.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6027

CODE: (IS)

DATE: 02/27/2002

SUBJECT: Work In Proximity Of High Voltage Power Lines

Bidders are hereby advised of Section 45-15-1, et seq., Mississippi Code of 1972, regarding the performance of work in the proximity of high voltage overhead power lines. It is the Contractor's responsibility to comply with those statutory requirements.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6143

CODE: (IS)

DATE: 05/22/2002

SUBJECT: Payments to Subcontractors

Bidders are hereby advised that each month, the Contractor will submit to the Project Engineer form OCR-484 certifying payments to all subcontractors. Form OCR-484 can be obtained from the Office of Civil Rights Division, MDOT Administration Building, 401 North West Street, Jackson, MS, or at the MDOT website under the *Business Section, Construction Contracts and Bidding, Disadvantaged Business Enterprise (DBE), Applications and Forms for the DBE Program.*

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6159

CODE: (IS)

DATE: 06/07/2002

SUBJECT: Contract Overpayment(s)

Bidders are hereby advised that by the execution of the contract for this project, the Contractor agrees that it has the duty to and will immediately reimburse the Mississippi Transportation Commission, without any demand therefore, for any overpayment(s) of which it has knowledge, or through due diligence, should have knowledge.

By the execution of the contract for this project, the Contractor also agrees that if the Mississippi Transportation Commission has made any overpayment(s) to the Contractor on any previously executed contract(s), the Mississippi Transportation Commission may notify the Contractor in writing of the nature and the amount of the overpayment(s). If the Contractor fails to remit the overpayment(s) to the Mississippi Transportation Commission within sixty (60) calendar days from the date of such notice, interest shall accrue from the date of such notification until payment is made in full at the rate of one percent (1%) per month until fully paid.

By the execution of the contract for this project, the Contractor also agrees that the Mississippi Transportation Commission may offset and withhold a sum equal to any overpayment(s) on any previously executed contract(s), plus interest, where applicable, against any sums due the Contractor under the terms of this contract or any other active contract(s).

By the execution of the contract for this project, the Contractor also agrees that if any overpayment(s) are made by the Mississippi Transportation Commission to the Contractor under the terms of this contract the Mississippi Transportation Commission shall have the right to offset and withhold that amount, plus interest, where applicable, from any sums which the Mississippi Transportation Commission might owe the Contractor on any other active contract(s) or any contract(s) executed subsequent to the execution of this contract.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6275

CODE: (IS)

DATE: 09/17/2002

SUBJECT: Federal Bridge Formula

Bidders are hereby advised that Federal Highway Administration Publication No. FHWA-MC-94-007, **BRIDGE FORMULA WEIGHTS**, dated January 1994, is made a part of this contract when applicable.

Prior to the preconstruction conference, the Contractor shall advise the Engineer, in writing, what materials, if any, will be delivered to the jobsite via Interstate route(s).

Copies of the **BRIDGE FORMULA WEIGHTS** publication may be obtained by contacting:

Federal Highway Administration
400 7th Street, SW
Washington, DC 20590
(202) 366-2212

or

<http://ops.fhwa.dot.gov/freight/regulate/sw/>

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6289

CODE: (IS)

DATE: 09/26/2002

SUBJECT: Certification of Traffic Control Devices

Category 1 Traffic Control Devices

Category 1 traffic control devices are defined as low-mass, single-piece traffic cones, tubular markers, single-piece drums, and delineators.

The Contractor shall certify to the Project Engineer by a letter ONLY stating that the Category 1 traffic control devices, furnished and used, either meet the requirements of NCHRP Report 350 or were purchased prior to October 1, 1998.

All documentation supporting the certification is to be kept on file by the Contractor subject to review by the Department at any time. Support documentation shall be kept on file for two years after the completion of the project.

The Contractor may self-certify Category 1 Traffic Control Devices. In order to make the self-certification, the Contractor shall have as a minimum the following support documentation regarding the certification.

1. A title, e.g., "Certification of Crashworthiness";
2. Name and address of vendor making the certification;
3. Unique identification of the certificate (such as serial number) with numbered pages and the total number of pages;
4. Description and unambiguous identification of the item tested;
5. Identification of the basis for self-certification process used and to what test level of NCHRP Report 350. This basis as crash test experience with similar devices or years of demonstrably safe operational performance;
6. A signature and title, or an equivalent identification of the person(s) accepting responsibility for the content of the certification, however produced, and the date of issue;
7. A statement that the certification shall not be reproduced except in full.

All documentation supporting the self-certification is to be kept on file by the Contractor subject to review by the Department at any time. Support documentation shall be kept on file for two years after the completion of the project.

The Contractor's letter to the Project Engineer shall state that all Category 1 traffic control devices, furnished and used, were purchased after October 1, 1998 and met the requirements of NCHRP Report 350, or that the Category 1 traffic control devices, furnished and used, were purchased prior to October 1, 1998.

Category 2 Traffic Control Devices

Category 2 traffic control devices are defined as barricades, intrusion detectors, vertical panel assemblies, portable sign supports, drums with warning lights, and cones with warning lights.

The Contractor shall certify to the Project Engineer by a letter ONLY stating that the Category 2 traffic control devices, furnished and used, either meet the requirements of NCHRP Report 350 or were purchased prior to October 1, 2000. The Contractor's letter shall state that all Category 2 traffic control devices, furnished and used, were purchased after October 1, 2000 and met the requirements of NCHRP Report 350, or that the Category 2 traffic control devices, furnished and used, were purchased prior to October 1, 2000.

Category 3 Traffic Control Devices

Category 3 Traffic Control Devices are items similar to Category 2 but weigh more than 100 pounds. Category 3 Traffic Control Devices include concrete barrier, truck mounted attenuators (TMAs), workzone crash cushions, and fixed sign supports.

Concrete barrier and fixed sign supports, furnished and used, and purchased after October 1, 2002 must meet the requirements of Report 350.

The Contractor shall furnish a letter ONLY certifying that all concrete barrier and fixed sign supports purchased after October 1, 2002 meets the requirements of NCHRP Report 350. Concrete barrier and fixed sign supports purchased prior to October 1, 2002 may be used without written certification until they complete their normal service life.

Work zone crash cushions and truck mounted attenuators (TMAs), furnished and used, and purchased after October 1, 1998 must meet the requirements of Report 350.

The Contractor shall furnish a letter certifying that all work zone crash cushions and TMAs purchased after October 1, 1998 meets the requirements of NCHRP Report 350. Work zone crash cushions and TMAs purchased prior to October 1, 1998 may be used without written certification until they complete their normal service life.

Contractor's Letter to the Project Engineer

The following is an example of a letter to the Project Engineer.

"I, (*Contractor's name*), certify that the Category 1 traffic control devices used on this project and purchased after October 1, 1998 meet the requirements of NCHRP Report 350 and all Category 1 traffic control devices used on this project not meeting NCHRP Report 350 were purchased prior to October 1, 1998.

I also certify that the Category 2 traffic control devices used on this project and purchased after October 1, 2000 meet the requirements on NCHRP Report 350 and all Category 2 traffic control devices used on this project not meeting NCHRP Report 350 were purchased prior to October 1, 2000.

I also certify that except for concrete median barrier, all of the Category 3 traffic control devices crash cushions and truck mounted attenuators used on this project and purchased after October 1, 1998 meet the requirements on NCHRP Report 350 and all Category 3 crash cushions and truck mounted attenuators used on this project not meeting NCHRP Report 350 were purchased prior to October 1, 1998."

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6333

CODE: (SP)

DATE: 10/23/2002

SUBJECT: Submission of Form OCR-485

Bidders are hereby advised that prior to the November 2002 letting, Form OCR-485 was completed by the apparent low bidder and submitted 10 days after opening of the bids. Beginning with the November 2002 letting, Form OCR-485 will be completed by **ALL BIDDERS** submitting a bid proposal and **must be included in the bid proposal package**. Failure to include Form OCR-485 in the bid proposal package will cause the Contractor's bid to be considered **irregular**.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6484

CODE: (SP)

DATE: 03/19/2003

**SUBJECT: Storm Water Discharge Associated with Construction Activity
(≥ 5 Acres)**

PROJECT: IM-0055-03(076) / 103395 - GRENADA & YALOBUSHA COUNTIES

A Construction Storm Water General NPDES Permit to discharge storm water associated with construction activity is required.

The Department has acquired Certificate of Permit Coverage [MSR-102941](#) under the Mississippi Department of Environmental Quality's (MDEQ) Storm Water Construction General Permit. Projects issued a certificate of permit coverage are granted permission to discharge treated storm water associated with construction activity into State waters. Copies of said permit, completed Construction Notice of Intent (CNOI), and Storm Water Pollution Prevention Plan (SWPPP) are on file with the Department.

Prior to the execution of the contract, the successful bidder shall execute and deliver to the Executive Director an original signed copy of the completed Prime Contractor Certification ([Form No. 1](#)).

Failure of the bidder to execute and file the completed Prime Contractor Certification ([Form No. 1](#)) shall be just cause for the cancellation of the award.

The executed Prime Contractor Certification ([Form No. 1](#)) shall be prima facie evidence that the bidder has examined the permit, is satisfied as to the terms and conditions contained therein, and that [the bidder](#) assumes the responsibility for meeting all permit terms and conditions and for performing permit requirements including, but not limited to, the inspection and reporting requirements of Part IV. For this project, the [Contractor](#) shall furnish, set up and read, as needed, an on-site rain gauge.

In accordance with Part IV.B, the Contractor shall display proof of coverage at a conspicuous place accessible by the public on or at the edge of the construction site.

The Contractor shall make inspections in accordance with Part IV.D and shall furnish the Project Engineer with the results of each weekly inspection as soon as possible following the date of inspection. A copy of the form provided in Part VII with the inspection portion completed shall be sufficient. The weekly inspections must be documented on the Monthly Inspection Report and Certification Form. The Contractor's representative and the Project Engineer shall jointly review and discuss the results of the inspections so that corrective action can be taken. The Project Engineer shall retain copies of the inspection reports.

[An amount equal to 25 percent \(25%\) of the total estimated value of the work performed during each period in which the Contractor fails to submit the completed monthly Inspection](#)

Report and Certification Form to the Project Engineer will be withheld from the Contractor's earned work. Thereafter, on subsequent successive estimate periods, the percentage withheld will be increased at the rate of 25 percent per estimate period in which the non-conformance with this specification continues. Monies withheld for this non-conformance will be released for payment on the next monthly estimate for partial payment following the date the submittal of the completed Monthly Inspection Report and Certification Form is brought back into compliance with this specification.

Upon successful completion of all permanent erosion and sediment controls for a covered project, accepted and documented by the Engineer, a completed Notice of Termination (NOT) of Coverage form (provided in Part VIII.) shall be submitted to the Office of Pollution Control. All the monthly inspection forms will be submitted at this time with the Notice of Termination (NOT) of Coverage form. If no sediment and erosion control problems are identified, the prime contractor will receive a termination letter from the Office of Pollution Control.

In summary, prior to the execution of the contract, the successful bidder shall execute and deliver to the Executive Director an original signed copy of the completed Prime Contractor Certification (Form No. 1). Also, prior to the commencement of construction on the project, the Contractor shall transmit by letter an original signed copy of the completed Prime Contractor Certification (Form No. 2) to the Office of Pollution Control, P.O. Box 10385, Jackson, Mississippi 39289-0385. Copies of the completed Prime Contractor Certification (Form No. 2) and letter of transmittal shall be furnished the Project Engineer as proof of the required filing with the Office of Pollution Control. At project completion, when accepted and documented by the Engineer, a Notice of Termination of Coverage will be submitted to the Office of Pollution Control along with all monthly inspection forms.

Securing a permit (s) for storm water discharge associated with the Contractor's activity on any other regulated area the Contractor occupies, shall be the responsibility of the Contractor.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904- NOTICE TO BIDDERS NO. 6522

CODE: (SP)

DATE: 05/12/2003

SUBJECT: Removal of Construction Signs

Bidders are hereby advised that upon receipt of the **Final or Partial** Maintenance Release, as documented in writing by the State Construction Engineer, the Contractor shall have **fifteen (15)** calendar days in which to remove all construction signs on the project. It is agreed that if the signs are not removed within the **fifteen (15)** calendar days the signs shall be considered abandoned and shall become the property of the Mississippi Transportation Commission which may remove, use, and/or dispose of such signs as it sees fit.

The Contractor shall place and maintain appropriate construction signs for any additional work on the project after the Maintenance Release has been issued. These construction signs will not be measured for separate payment. Payment for these signs shall be included in Pay Item No. 618-A, Maintenance of Traffic.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6618

CODE: (SP)

DATE: 6/19/2003

SUBJECT: Submittal of Hydrated Lime Shipping Tickets

In accordance with Subsection 907-401.02.3.1 of the specifications, the Contractor shall provide the District Materials Engineer with a copy of each shipping ticket from the supplier including the project number, date, time and weight of hydrated lime shipped and used in Hot Mix Asphalt (HMA) production.

The Contractor is advised that an amount equal to twenty-five percent (25%) of the total value of HMA items performed during the initial estimate period in which the Contractor fails to submit the hydrated lime shipping tickets to the District Materials Engineer will be withheld from the Contractor's earned work. Non-conformance with this specification for successive estimate period(s) will result in the total value (100%) of HMA items performed during this period(s) being withheld from the Contractor's earned work. Monies withheld for this non-conformance will be released for payment on the next monthly estimate following the date the submittal of hydrated lime shipping tickets to the District Materials Engineer is brought back into compliance with this specification.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6783

CODE: (IS)

DATE: 10/28/2003

SUBJECT: Fuel Tax Applicability to Bidders and Contractors

Bidders are hereby advised that the “Mississippi Special Fuel Tax Law”, Section 27-55-501, et seq. and its requirements and penalties apply to any contract for construction, reconstruction, maintenance or repairs, for contracts entered into with the State of Mississippi, any political subdivision of the State of Mississippi, or any Department, Agency, Institute of the State of Mississippi or any political subdivision thereof.

The Mississippi State Tax Commission will be notified of the name and address of the Contractor that is awarded this contract. The Contractor will be subject to an audit during the life of this contract to make certain that all applicable fuel taxes are being paid promptly as outlined in Section 27-55-501, et seq.

In addition to any audits performed by the Mississippi State Tax Commission, the Department also reserves the right to audit the Contractor’s records during the life of this contract to make certain that all applicable fuel taxes are being paid promptly as outlined in Section 27-55-501, et seq.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6794

CODE: (SP)

DATE: 11/12/2003

SUBJECT: Estimated Monthly Quantities

Bidders are hereby advised that each month the Contractor works, the Engineer furnishes the Contractor with a monthly progress estimate showing the total estimated quantities for each pay item in the contract. The Contractor should review the Engineer's progress estimate as to the accuracy of the quantities. Should the Engineer's estimated quantity for any pay item be greater than a tolerance of plus or minus ten percent ($\pm 10\%$) of the Contractor's estimated quantity, the Contractor should confer with the Resident or Project Engineer to rectify any differences. Each should make a record of the differences, if any, and conclusions reached. In the event mutual agreement cannot be reached, the Contractor will be allowed a maximum of 15 calendar days following the ending date of the monthly estimate in question to file in writing, a protest Notice of Claim in accordance with the provisions Subsection 105.17. Otherwise, the Engineer's estimated quantities shall be considered acceptable pending any changes made during the checking of final quantities.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6840

CODE: (SP)

DATE: 02/09/2004

SUBJECT: Petroleum Products Base Prices For Contracts Let In March, 2004

REFERENCE: Subsection 907-109.07

The following base prices are to be used for adjustment in compensation due to changes in costs of petroleum products:

FUELS

	<u>Per Gallon</u>	<u>Per Liter</u>
Gasoline	\$1.4328	\$0.3785
Diesel	\$1.3138	\$0.3471

MATERIAL OF CONSTRUCTION

<u>Asphalt Cements**</u>	<u>Per Gallon</u>	<u>Per Ton</u>	<u>Per Liter</u>	<u>Per Metric Ton</u>
Viscosity Grade AC-5	\$0.8079	\$191.67	\$0.2134	\$211.28
Viscosity Grade AC-10	\$0.7882	\$187.00	\$0.2082	\$206.13
Viscosity Grade AC-20	\$0.7762	\$184.14	\$0.2051	\$202.98
Viscosity Grade AC-30	\$0.7762	\$184.14	\$0.2051	\$202.98
Grade PG-58-28	\$0.8043	\$190.83	\$0.2125	\$210.35
Grade PG 64-22	\$0.7828	\$185.71	\$0.2068	\$204.71
Grade PG 67-22	\$0.7882	\$187.00	\$0.2082	\$206.13
Grade PG 76-22	\$1.1486	\$272.50	\$0.3034	\$300.37
Grade PG 82-22	\$1.3016	\$308.80	\$0.3438	\$340.39

Emulsified Asphalts

Grade EA-4 (SS-1)	\$0.7267	\$0.1920
Grade RS-2C (CRS-2)	\$0.7433	\$0.1964
Grade CRS-2P	\$0.8590	\$0.2269

Primes

Grades EA-1 and MC-70	\$0.9550	\$0.2523
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MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6861

CODE: (SP)

DATE: 01/28/2004

SUBJECT: CONTRACT TIME

**PROJECT: IM-0055-03(076) / 103395 -
GRENADA & YALOBUSHA COUNTIES**

The completion of work to be performed by the Contractor for this project will not be a specified date but shall be when all allowable time units are assessed, or any extension thereto as provided in Subsection 907-108.06. It is anticipated that the Notice to Proceed will be issued by not later than May 3, 2004 and the date for Beginning of Contract Time will be May 13, 2004.

Allowable Time Units will be 110.

The contract time has been based on Column "D" of the Table of Time Units, in Subsection 907-108.06.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6864

CODE (SP)

DATE: 01/28/2004

SUBJECT: Placement of Fill Material in Federally Regulated Areas

**PROJECT: IM-0055-03(076) / 103395
GRENADA & YALOBUSHA COUNTIES**

A Permit (404, General, Nationwide, etc.) for placing fill material federally regulated sites is required.

The Department has acquired the following permit for permanently filling at regulated sites that are identified during project development:

Nationwide Permit No. 14 (Waters of U.S.) -- All sites with area less than 0.10 acre

Copies of said permit(s) are on file with the Department.

Securing a permit(s) for the filling of any other regulated site, the purpose of which is temporary construction for the convenience of the Contractor, shall be the responsibility of the Contractor.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6881

CODE: (SP)

DATE: 02/04/2004

SUBJECT: Specialty Items

PROJECT: IM-0055-03(076)/103395--GRENADA & YALOBUSHA COUNTY(IES)

Pursuant to the provisions of Section 108, the following work items are hereby designated as "Specialty Items" for this contract. Bidders are reminded that these items must be subcontracted in order to be considered as specialty items.

CATEGORY: EROSION CONTROL

Ref No	Pay Item	Description
60	213-C	Superphosphate
70	219-A	Watering
80	220-A	Insect Pest Control
90	907-225-A	Grassing
100	907-225-B	Agricultural Limestone

CATEGORY: GUARDRAIL

Ref No	Pay Item	Description
180	606-A	Guard Posts
190	606-B	Guard Rail, Class A, Type 1
200	606-C	Guard Rail, Cable Anchor, Type 1
210	907-606-E	Guard Rail, Terminal End Section
211	907-606-E	Guard Rail, Terminal End Section
400	630-F	Delineators (Guard Rail)(White)
410	630-F	Delineators (Guard Rail)(Yellow)

CATEGORY: PAVEMENT MARKING

Ref No	Pay Item	Description
320	907-626-HH	Thermoplastic Legend (White)(120 mil. min.)
330	907-626-I	6" Inverted Profile Thermoplastic Traffic Stripe (Skip White)
340	907-626-J	6" Inverted Profile Thermoplastic Traffic Stripe (Continuous White)
350	907-626-L	6" Inverted Profile Thermoplastic Traffic Stripe (Continuous Yellow)
370	907-626-M	Inverted Profile Thermoplastic Detail Traffic Stripe (6" Equivalent
380	907-626-M	Inverted Profile Thermoplastic Detail Traffic Stripe (6" Equivalent
390	907-627-K	Red-Clear Reflective High Performance Raised Markers

CATEGORY: SIGNING

Ref No	Pay Item	Description
420	630-F	Delineators (Post Mounted)(Double White)
430	630-F	Delineators (Post Mounted)(Double Yellow)
440	630-F	Delineators (Post Mounted)(Single White)
450	630-F	Delineators (Post Mounted)(Single Yellow)

CATEGORY: TRAFFIC CONTROL

Ref No	Pay Item	Description
230	907-619-A1	Temporary Traffic Stripe (Continuous White)
240	907-619-A2	Temporary Traffic Stripe (Continuous Yellow)
250	907-619-A3	Temporary Traffic Stripe (Skip White)
260	907-619-A5	Temporary Traffic Stripe (Detail)
270	907-619-A6	Temporary Traffic Stripe (Legend)
280	907-619-E3	Changeable Message Sign
290	619-G4	Barricades (Type III) (Double Faced)
300	619-G4	Barricades (Type III) (Single Faced)
310	619-G5	Free Standing Plastic Drums

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6883

CODE: (SP)

DATE: 02/06/2004

SUBJECT: Current Traffic & Estimated Accumulated ESALs

PROJECT: IM-0055-03(076) / 103395 - Grenada & Yalobusha Counties

Bidders are hereby advised of the current traffic and estimated accumulated ESALs. See page 5 of Special Provision 907-403-17 for further reference.

I-55 – from SR 8 to SR 330			
Year	Projected ADT	Average 18 kip Axle Loads per 1,000 Vehicles	Cumulative Thousands Of 18 k ESALs From Base Year
2004	23,000	1454	0
2011	30,000	1897	11,699

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 -NOTICE TO BIDDERS NO. 6886

CODE: (SP)

DATE: 02/10/2004

SUBJECT: Cold Milling Material

PROJECT: IM-0055-03(076)/103395 – Grenada & Yalobusha Counties

Bidders are hereby advised that a partial amount of the cold milling material shall remain the property of the State. The contractor shall haul and stockpile the milled material to the locations described below. Adequate equipment must be available to properly stockpile the material. Costs for hauling and stockpiling material, including incidental items, shall be included in other items bid.

1. Two (2) miles of one lane to the Yalobusha County Maintenance Headquarters near Coffeeville.
2. Twelve (12) miles of one lane to the Grenada County Maintenance Headquarters near Grenada.

The remaining cold milling material shall become the property of the contractor.

SUPPLEMENT TO FORM FHWA-1273

The following MINIMUM HOURLY WAGE RATES have been predetermined by the Secretary of Labor in Wage Determination Decision No. MS030021 dated 6/13/2003.

AREA 2 - COUNTIES

BOLIVAR, CARROLL, COAHOMA, GRENADA, LEFLORE, MONTGOMERY, PANOLA, QUITMAN, SUNFLOWER, TALLAHATCHIE, TATE, TUNICA, WASHINGTON AND YALOBUSHA

<u>PAYROLL CODE</u>	<u>CLASSIFICATION</u>	<u>MINIMUM HOURLY WAGE RATE</u>
100	Air Tool Operator (Jack Hammer/Air Comp.)	\$5.15
105	Asphalt Raker	6.55
108	Mason Tender (Cement Mason Helper)	6.84
110	Carpenter	8.56
120	Cement Mason (Finisher)	8.07
130	Electrician	16.34
131	Mechanic (Heavy Equipment)	8.83
135	Oiler-Greaser	7.60
140	Form Setter	7.00
145	Grade Checker (Asphalt Crew)	7.50
150	Ironworker, Reinforcing (Tie Steel)	8.00
155	Ironworker, Structural	7.26
160	Laborer, Unskilled	6.12
165	Pipelayer	7.42
175	Painter (Structural Steel)	8.23
180	Piledriverman	7.71
185	Truck Driver (All Types)	6.66
190	Joint Filler	5.15
195	Joint Setter	5.15
197	Welder	9.03

POWER EQUIPMENT OPERATORS

205	Aggregate Spreader Operator	6.75
212	Asphalt Broom (Sweeper) Operator	5.75
214	Asphalt Paving Machine/Spreader Operator	7.47
215	Asphalt Distributor Operator	7.30
216	Asphalt Plant Operator	6.85
220	Backhoe (Shovel) Operator	8.72
225	Bulldozer Operator	8.83
235	Concrete Finishing/Curing Machine Operator	7.25
240	Concrete Paving Machine Operator (Spreader)	9.00
250	Concrete Saw Operator	8.30
255	Concrete Breaker & Hydro-Hammer Operator	8.24
270	Loader (All Types)	7.95
275	Milling Machine Operator	7.40
280	Mixer Operator (All Types)	6.00
285	Motor Patrol (Grader) Operator	9.22
290	Mulcher Machine Operator	6.00
295	Earth Auger Operator	8.00
300	Piledriver Machine Operator	10.50
305	Roller Operator (Self-Propelled)	6.57
310	Scraper Operator (All Types)	8.05
315	Striping Machine Operator	12.50
320	Tractor Operator (Track Type)	7.14
325	Tractor Operator (Wheel Type)	6.26
330	Trenching Machine Operator	8.01
350	Crusher Feeder Machine Operator	5.50
360	Crane (Dragline) Operator	9.47
365	Guardrail Post Driver	6.75

Authorized Payroll Code may be used in lieu of classification titles on weekly payrolls submitted to this Department. Codes or classification titles not conforming to those listed will not be acceptable.

SUPPLEMENT TO FORM FHWA-1273

DATE: **6/15/94**

SUBJECT: **Final Certificate and Contract Provisions for Subcontracts**

All subcontracts shall be in writing and contain all pertinent provisions and requirements of the prime contract.

Each "Request for Permission to Subcontract" (Mississippi Department of Transportation Form CAD-720) shall include a copy of subcontract for review by the Mississippi Department of Transportation. The federal contract provisions may be omitted from the subcontract copy submitted for review provided the Contractor certifies that the provisions will be physically incorporated into the agreement furnished to the Subcontractor.

In lieu of submitting a copy of the subcontract for review, the Contractor may certify that the subcontract agreement is in writing and that it contains all the requirements and pertinent provisions of the prime contract.

Each Subcontractor will be required to provide a copy of the subcontract agreement for contract compliance reviews, along with physical evidence (copy of FHWA-1273) that requirements and pertinent provisions have been provided for review and adherence.

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

	Page
I. General -----	1
II. Nondiscrimination -----	1
III. Nonsegregated Facilities -----	3
IV. Payment of Predetermined Minimum Wage -----	3
V. Statements and Payrolls -----	6
VI. Record of Materials, Supplies, and Labor-----	7
VII. Subletting or Assigning the Contract -----	7
VIII. Safety: Accident Prevention -----	7
IX. False Statements Concerning Highway Projects -----	8
X. Implementation of Clean Air Act and Federal Water Pollution Control Act-----	8
XI. Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion -----	8
XII. Certification Regarding Use of Contract Funds for Lobbying -----	10

ATTACHMENTS

- A. Employment Preference for Appalachian Contracts
(included in Appalachian contracts only)

I. GENERAL

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2;
Section IV, paragraphs 1, 2, 3, 4, and 7;
Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.

6. **Selection of Labor:** During the performance of this contract, the contractor shall not:

a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or

b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.*) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

b. The contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training."

2. **EEO Officer:** The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant

of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be

taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward

qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.

8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under an approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the

same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

(2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned,

without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:

a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.

b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.

c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).

a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary,

hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both."

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more.)

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and

d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive

Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared

ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables	Goals for female participation in each trade (percent)
From April 1, 1978 until March 31, 1979	3.1
From April 1, 1979 until March 31, 1980	5.1
From April 1, 1980 until March 31, 1981	6.9

Until further notice	Goals for minority participation for each trade (percent)
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SHSA Cities:

Pascagoula - Moss Point -----	16.9
Biloxi - Gulfport-----	19.2
Jackson-----	30.3

SMSA Counties:

Desoto-----	32.3
Hancock, Harrison, Stone-----	19.2
Hinds, Rankin-----	30.3
Jackson-----	16.9

Non-SMSA Counties:

George, Greene -----	26.4
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Alcorn, Benton, Bolivar, Calhoun, Carroll, Chickasaw, Clay, Coahoma, Grenada, Itawamba, Lafayette, Lee, Leflore, Marshall, Monroe, Montgomery, Panola, Pontotoc, Prentiss, Quitman, Sunflower, Tallahatchie, Tate, Tippah, Tishomingo, Tunica, Union, Washington, Webster, Yalobusha-----	26.5
--	------

Attala, Choctaw, Claiborne, Clarke, Copiah, Covington, Franklin, Holmes, Humphreys, Issaquena, Jasper, Jefferson, Jefferson Davis, Jones Kemper, Lauderdale, Lawrence, Leake, Lincoln, Lowndes, Madison, Neshoba, Newton, Noxubee, Oktibbeha, Scott, Sharkey, Simpson, Smith, Warren, Wayne, Winston, Yazoo -----	32.0
--	------

Forrest, Lamar, Marion, Pearl River, Perry, Pike, Walthall -----	27.7
---	------

Adams, Amite, Wilkinson-----	30.4
------------------------------	------

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor, estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is to the county and city (if any), stated in the advertisement.

5. The notification required in Paragraph 3 shall be addressed to the following:

Contract Compliance Officer
Mississippi Department of Transportation
P.O. Box 1850
Jackson, Mississippi 39215-1850

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| SPECIAL PROVISION NO. 907-101-5

CODE: (IS)

| DATE: 01/03/2002

SUBJECT: Definitions

Section 101, Definitions and Terms, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-101.02--Definitions. Delete the definition of "Change Order" on page 101-4.

Delete the definition of "Extra Work Order" on page 101-6.

Delete the definition of "Optional Items" on page 101-8 and substitute:

Optional Items - Items listed in the bid schedule of the proposal which are considered to be comparable for the purpose intended, and the Contractor is required to make a selection prior to or at the time of execution of the contract.

After the eighth definition on page 101-9, add the following:

Quantity Adjustment - A modification of contract quantities covering increases or decreases resulting from plan errors, omissions or changes made necessary in order to carry out the intent of the plans.

| Delete Figure 1 at the end of Section 101 on page 101-13, and substitute the following:

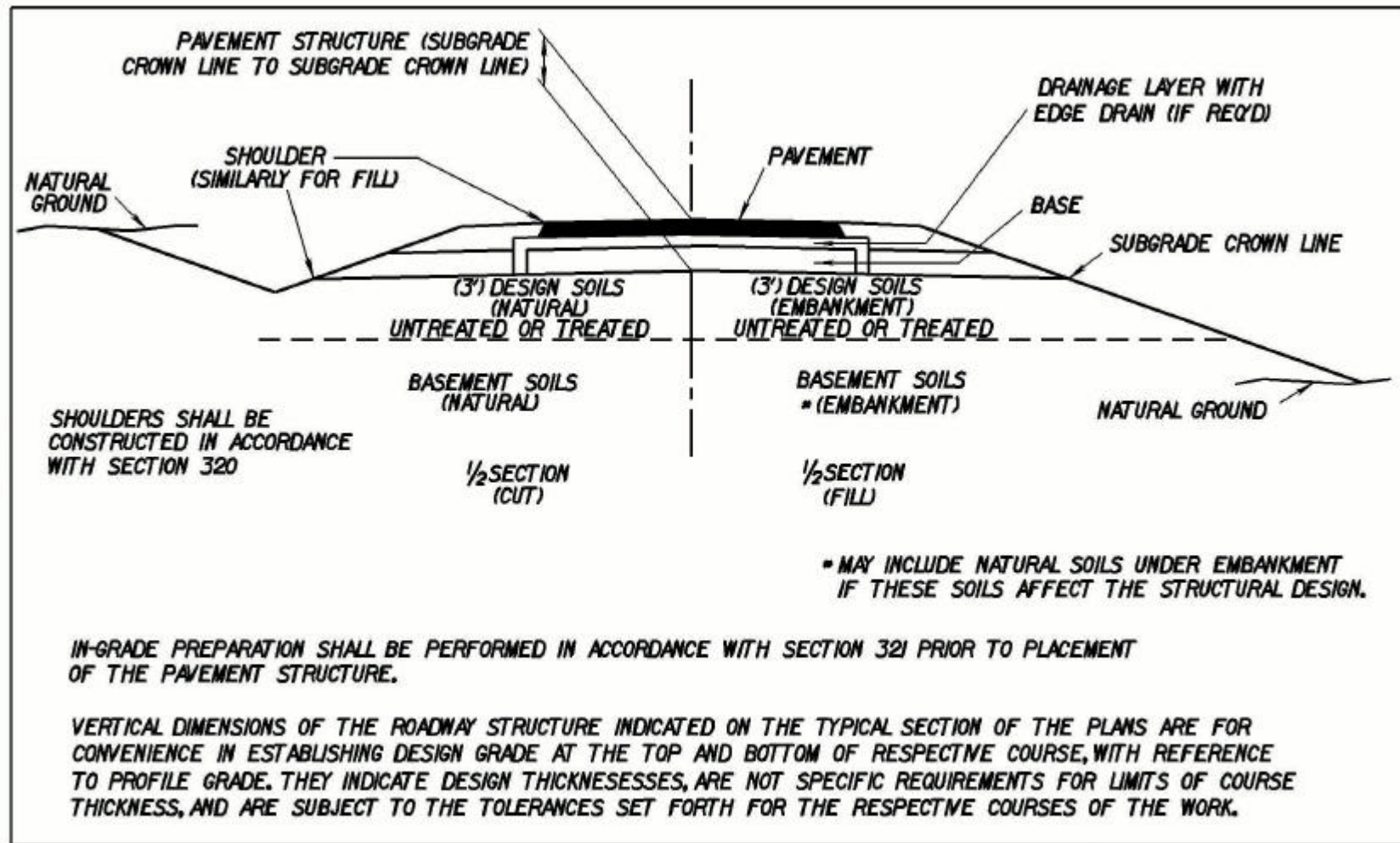


FIGURE 1 - REFERENCE DIVISION 100 - PAGE 101-1

MISSISSIPPI STATE HIGHWAY DEPARTMENT

SPECIAL PROVISION NO. 907-102-1

CODE: (IS)

DATE: 9/5/90

SUBJECT: Combination Bids

Section 102, Bidding Requirements and Conditions, of the 1990 Edition of the Standard Specifications for Road and Bridge Construction, is hereby amended as follows:

Delete Subsection 102.11 in toto and substitute the following:

907-102.11--Combination Bids. Combination bids which combine two or more individual projects may be submitted by stating in writing on each project proposal to be considered in the combination, one of the following:

- (a) That the bidder is bidding on "All or None" of the work for designated proposals. The Department will evaluate all bids on these proposals and make awards based on the bids most advantageous to the State.
- (b) The reduction the bidder will make in the unit price of one or more of the items in any or all of the proposals if awarded the combination; however, the bidder will not be permitted to make a reduction in any unit price that may be fixed by the Department in the proposal. The Department will select from the proposals submitted the individual or combination bids most advantageous to the State.
- (c) That he is bidding on a number of projects but desires to be awarded work not to exceed a specified total amount or a specified number of contracts. The Department will select from his proposal those which are most advantageous to the State within its specified amount or total number of contracts.

Combination bids which state that a lump sum shall be deducted from the final estimate or retained percentage, or that a reduction in prices shall be made on a percentage basis, or that states that award of a job is contingent upon being awarded another job will not be accepted and the bids with which such a letter is submitted will be considered irregular and rejected.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| SPECIAL PROVISION NO. **907-102-8**

CODE: (IS)

| DATE: **03/01/2002**

SUBJECT: **Preparation of Proposal**

Section 102, Bidding Requirements and Conditions, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-102.06--Preparation of Proposal. Delete in toto the second full paragraph on page 102-4 and substitute:

Bid sheets generated by the Department's Electronic Bid System (EBS) along with a completed proposal package will constitute the official bid and shall be signed on the last sheet of the EBS generated bid sheets and delivered to the Department in accordance with the provisions of Subsection 102.09.

Bidders are cautioned that using older versions of the EBS will result in improperly printed bid sheets. The latest version of the EBS can be obtained at no cost from the MDOT Contract Administration Division or at the MDOT website, www.mdot.state.ms.us.

If bidders submit EBS generated bid sheets, then the bid sheets included in the proposal should not be completed. The EBS generated bid sheets should be stapled together and included in the bid proposal package in the sealed envelope. If both the forms in the proposal and the EBS generated bid sheets are completed and submitted, only the EBS generated sheets will be recognized and used for the official bid. The diskette containing the information printed on the EBS generated bid sheets should be placed in the pouch located on the inside of the front cover of the bid proposal package. Bid sheets printed from the EBS should be a representation of the data returned on the diskettes. To have a true representation of the bid sheets, the Bidder must copy the inputted unit prices back to the diskette by using the option titled "Copy Project File To Floppy Disk" from the drop-down menu under "Projects". Otherwise, the unit prices bid will not be recorded to the diskette. Bidders are cautioned that failure to follow proper diskette-handling procedures could result in the Department being unable to process the diskette. **Any modification or manipulation of the data contained on the diskette, other than entering unit bid prices, will not be allowed and will cause the Contractor's bid to be considered irregular.**

When the bid schedule lists optional items, the Contractor's selection may, but is not required to, be made at the time of bidding. For optional items not pre-selected, the Contractor's selection shall be made prior to or at the time of execution of the contract.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-103-5

CODE: (IS)

DATE: 12/2/99

SUBJECT: Execution and Approval of Contract

Section 103, Award and Execution of the Contract, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-103.01-Consideration of Proposals. Delete the third paragraph of Subsection 103.01 on page 103-1, and substitute the following:

In consideration of contract proposals which are equal to or in excess of \$50,000 and financed 100% with State funds, a nonresident bidder domiciled in a state having laws granting preference to local Contractors will be considered for such contracts on the same basis as the nonresident bidder's state awards contracts to Mississippi Contractors bidding under similar circumstances. When a nonresident Contractor submits a bid equal to or in excess of \$50,000 on a contract financed 100% with State funds, a copy of the current laws from the state of domicile and an explanation thereof pertaining to treatment of nonresident Contractors shall be attached. If no preferential treatment is provided for Contractors in the state of domicile and contracts are awarded to the lowest responsible bidder, a statement to this effect shall be attached. Should the attachment not accompany the bid when submitted, the Contractor shall have 10 days following the opening of the bids to furnish the required information to the Contract Administration Engineer for attachment to the bid. As used herein, the term "resident Contractors" includes a nonresident person, firm or corporation that has been qualified to do business in this State and has maintained a permanent full-time office in the State of Mississippi for two years prior to January 1, 1986, and the subsidiaries and affiliates of such a person, firm or corporation.

907-103.04--Return of Proposal Guaranty. Delete the third paragraph of Subsection 103.04 on page 103-2 and substitute the following:

In the event no award is made within **30 days** after the opening of bids, the Executive Director may permit the successful bidder to replace the certified check or cashier's check with a satisfactory bidder's bond.

Delete in toto Subsection 103.07 on page 103-2, and substitute the following:

907-103.07--Execution and Approval of Contract. The successful bidder to whom the contract has been awarded shall sign and file with the Director the contract and all documents required by the contract within **10 days** after the contract has been mailed to the bidder. The contract may require certain documents be submitted at an earlier date, in which case, those documents shall be submitted within the time frame specified. If the contract is not executed by the Department within 15 days following receipt of the signed contract and all necessary documents, the bidder shall have the right to withdraw his bid without penalty. No contract is in effect until it is executed by all parties.

907-103.08--Failure to Execute Contract. Delete in toto Subsection 103.08 on page 103-2, and substitute the following:

Failure of the bidder to execute the contract and file acceptable bond within **10 days** shall be just cause for the cancellation of the award and forfeiture of the proposal guaranty which shall become the property of the Department, not as a penalty but in liquidation of damages sustained. Award may then be made to the next lowest responsible bidder, or the work may be readvertised at the discretion of the Department.

MISSISSIPPI STATE HIGHWAY DEPARTMENT

SPECIAL PROVISION NO. 907-104-3

CODE: (IS)

DATE: 11/27/91

SUBJECT: Significant Changes in the Character of Work and Differing Site Conditions

Section 104, Scope of Work, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-104.02.1--Significant Changes in the Character of Work.

Delete the first sentence of the first paragraph of Subsection 104.02.1 on page 104-1 and substitute:

If the alterations or changes in quantities significantly change the character of the work under the contract, whether such alterations or changes are in themselves significant changes to the character of the work or by affecting other work cause such other work to become significantly different in character, an adjustment, excluding anticipated profit, will be made to the contract.

Delete the last paragraph of page 104-2 and the first paragraph of page 104-3 and substitute:

907-104.02.2--Differing Site Conditions. During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before the site is disturbed and before the affected work is performed.

Upon written notification by the Contractor, the Engineer will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding anticipated profits, will be made and the contract modified in writing accordingly. The Engineer will notify the Contractor of the determination whether or not an adjustment of the contract is warranted.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-104-8

CODE: (IS)

DATE: 7/25/94

SUBJECT: Partnering Process

Section 104, Scope of Work, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-104.01--Intent of Contract.

After the end of Subsection 104.01 on page no. 104-1, add the following:

907-104.01.1--Partnering Process.

COVENANT OF GOOD FAITH AND FAIR DEALING:

This contract imposes an obligation of good faith and fair dealing in its performance and enforcement.

The contractor and the Department, with a positive commitment to honesty and integrity, agree to the following mutual duties:

- A. Each will function within the laws and statutes applicable to their duties and responsibilities.
- B. Each will assist in the other's performance.
- C. Each will avoid hindering the other's performance.
- D. Each will proceed to fulfill its obligations diligently.
- E. Each will cooperate in the common endeavor of the contract.

VOLUNTARY PARTNERING:

The Mississippi Department of Transportation intends to encourage the foundation of a cohesive partnership with the contractor and its principal subcontractors and supplier. This partnership will be structured to draw on the strengths of each organization to identify and achieve reciprocal goals. The objectives are effective and efficient contract performance and completion within budget, on schedule, and in accordance with plans and specifications.

This partnership will be bilateral in make-up, and participation will be totally voluntary. Any cost associated with effectuating this partnering will be agreed to by both parties and will be shared equally.

To implement this partnering initiative prior to starting of work in accordance with the requirements of Subsection 108.02 Notice to Proceed and prior to the preconstruction conference, the contractor's management personnel and MDOT's District Engineer, will initiate a partnering development seminar/team building workshop. The Contractor working with the assistance of the District and the State Construction Engineer will make arrangements to determine attendees for the workshop, agenda of the workshop, duration, and location. Persons required to be in attendance will be the MDOT key project personnel, the contractor's

on-site project manager and key project supervision personnel of both the prime and principal subcontractors and suppliers. The project design engineers, FHWA and key local government personnel will be also be invited to attend as necessary. The contractors and MDOT will also be required to have Regional/District and Corporate/State level managers on the project team.

Follow-up workshops may be held periodically throughout the duration of the contract as agreed by the contractor and Mississippi Department of Transportation.

The establishment of a partnership charter on a project will not change the legal relationship of the parties to the contract nor relieve either party from any of the terms of the contract.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| SPECIAL PROVISION NO. 907-104-12

CODE: (IS)

| DATE: 04/11/2003

SUBJECT: Minor Alterations to the Contract

Section 104, Scope of Work, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

After the end of Subsection 104.02.2 on page 104.3, add the following:

907-104.02.3--Minor Alterations to the Contract. When the Department makes alterations in the details of construction or specifications that are minor in nature, the Resident or Project Engineer may elect to make an equitable adjustment to the contract under the provisions of this subsection. Minor alterations shall be defined as those alterations to the contract that are not addressed in the Standard Specifications, or supplements thereto, and are valued at less than \$5,000.00. The District Engineer shall designate, in writing, the Resident or Project Engineer authorized to execute the Class I Supplemental Agreement. The Resident or Project Engineer and Contractor shall agree upon the scope of work and a lump sum amount, within the above stated limit, for the work to be performed. The agreement shall be reflected in a Class I Supplemental Agreement signed by the Resident or Project Engineer and the Contractor's authorized representative, which, when it bears both the signature of the Resident or Project Engineer and Contractor, shall constitute the scope of work and basis of payment under the item "Minor Alterations to the Contract." Work shall not proceed until both parties sign the agreement.

Any adjustment of contract time due to Minor Alterations will be in accordance with Subsection 108.06 of the Standard Specifications.

Payment will be made under:

| 907-104-A S/A: Minor Alterations to the Contract

- lump sum

(This pay item is not to be included on the plans or in the contract proposal)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-105-9

CODE: (IS)

DATE: 9/8/95

SUBJECT: Claims

Section 105, Control of Work, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-105.17--Claims for Adjustments and Disputes. Delete in toto Subsection 105.17 on pages 105-10 and 105-11 and substitute the following:

It is in the public interest that the Department have early or prior knowledge of an existing or impending claim of any nature by the Contractor so that the Department may appropriately consider modifying the details of the work or other actions of the Department which might result in mitigation or elimination of the effect of the act or conditions objected to by the Contractor and so that the Department may institute appropriate procedures, as required, to keep strict account of actual costs and to verify, at the time, facts upon which a claim for contract time adjustment is made. Therefore, if in any case the Contractor deems that additional compensation is due for work or materials not clearly covered in the contract or not ordered by the Engineer as Extra Work, or if the Contractor deems that adjustment in the contract time should be made because of any of the reasons provided for in the contract as a basis for an extension of time, the Contractor shall notify the Engineer in writing of an intention to make such claim for additional compensation before beginning the work on which the Contractor bases the claim or for such extension of time as soon as the facts first become known on which the Contractor bases the claim for adjustment. If such written notification is not given by the Contractor in accordance with these specifications and the Engineer and the Department's Audit Division are not afforded proper facilities by the Contractor for keeping strict account of actual costs or verification at the time of facts upon which a claim for contract adjustment is made, the Contractor hereby agrees that failure to provide written notice has denied the Department the prerogative of verifying additional time, materials, equipment, labor and making adjustments in the work which might remove or alleviate the conditions for which a claim might be made, and the Contractor further agrees that such failure on the Contractor's part shall be a conclusive waiver of any claim, or part thereof.

Mere oral notice or statement will not be sufficient, nor will an unnecessarily delayed notice or statement after the event.

Any such notice shall be in writing and shall describe any act of omission or commission by the Department or its agents that allegedly caused or contributed to the condition for which a claim may be made and the nature of the claimed damage. The Contractor shall deliver or mail the notice to the Project Engineer.

Upon receipt of the notice, the Project Engineer will acknowledge receipt in writing to the Contractor with a copy of the notice and acknowledgment to the District Engineer, State Construction Engineer and the Department's Audit Director.

The Project Engineer will evaluate the Contractor's claim and forward his/her recommendations to the District Engineer with a copy to the State Construction Engineer and the Department's Audit Director.

The State Construction Engineer, after consultation with the District Engineer and Project Engineer, will notify the Audit Division of the Contractor's claim and request that the Audit Director take the necessary steps to review the legitimacy of the Contractor's documentation of the claim.

Even when the Audit Division determines that the Contractor's documentation relative to the time, materials, equipment and labor are legitimate, that division will continue to monitor the Contractor's charges until the Contractor's services are complete.

Such notice by the Contractor and the fact that the Engineer has kept account of the costs and the Audit Division has verified the legitimacy of the Contractor's documentation and other facts as aforesaid shall not in any way be construed as substantiating the validity of a claim.

In presenting a claim, the Contractor shall clearly and specifically state:

- (a) The contract subsection number(s) under which each part of the claim is made.
- (b) The event(s) or conditions covered in each such subsections and made the basis for each part of the claim.
- (c) A claim for additional compensation shall include supporting auditable cost figures from entries made in the original records entered at the time of the work. The Contractor will be required to provide all records that the Department's Audit Director deems necessary for the performance of an audit in accordance with the United States General Accounting Office's Governmental Auditing Standards, the Institute of Internal Auditor's Professional Practice Standards, and the American Institute of Certified Public Accountant's Auditing Standards.

All claims made shall be sent to the Resident or Project Engineer for review and processing.

If a claim is so vague that the Engineer cannot reasonably and expeditiously determine the specific contractual provisions relied on by the Contractor as the basis of each part of the claim, or if the Audit Director cannot reasonably and expeditiously determine that the costs related to the claim are related specifically to the reference project and are not related to any other project(s) that the Contractor is constructing or has constructed, it will be denied by the Engineer or returned without action.

Any part of a claim based on after-the-fact general statements of costs such as "Normal cost of such work", "computed as a percentage of..... etc." or other such indefinite statements will be denied or returned to the Contractor without action.

The Resident or Project Engineer may request supplemental data in writing, or return the claim to the Contractor for resubmission in accordance with these specifications.

A claim, as approved by the Department, will be paid in accordance with the provisions of 104.02 and 104.03 and adjustments in contract time will be made in accordance with the provision of 108.06. When a claim is denied or returned without action, the notice will state the reasons thereof.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-106-1

CODE: (IS)

DATE: 9/22/93

SUBJECT: Convict Produced Materials

Section 106, Control of Materials, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

After the end of Subsection 106.12 on page no. 106-5, add the following:

907-106.13--Convict Produced Materials.

Materials produced after July 1, 1991, by convict labor may only be incorporated in a Federal-Aid highway construction project if such materials have been:

- (1) Produced by convicts who are on parole, supervised release, or probation from a prison or
- (2) Produced in a qualified prison facility and the cumulative annual production amount of such materials for use in Federal-aid highway construction does not exceed the amount of such materials produced in such facility for use in Federal-aid highway construction during the 12-month period ending July 1, 1987.

Qualified prison facility means any prison facility in which convicts, during the 12-month period ending July 1, 1987, produced materials for use in Federal-Aid highway construction projects.

MISSISSIPPI STATE HIGHWAY DEPARTMENT

SPECIAL PROVISION NO. 907-107-6

CODE: (IS)

DATE: 5/3/93

SUBJECT: Material Pits (NPDES Permits)

Section 107, Legal Relations and Responsibility to Public, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-107.23--Material Pits.

At the end of Subsection 107-23 on page 107-20, add the following:

The Contractor is further reminded of the Clean Water Act Amendments requiring National Pollutant Discharge Elimination System (NPDES) permits for discharges composed entirely of storm water from active or inactive surface mining operations, excluding work areas covered by a U. S. Army Corps of Engineers Clean Water Act Section 404 Permit. Questions or problems concerning NPDES permits should be directed to the Mississippi Department of Environmental Quality (MDEQ), Office of Pollution Control, Industrial Branch, Jackson, Mississippi.

The Contractor shall, before a regulated area is opened or enlarged as a material pit, obtain from MDEQ the necessary Mining Storm Water NPDES Permit(s) authorizing the discharge of storm water subject to the terms and conditions of said permit. All costs involved in obtaining the permit(s) shall be borne by the Contractor. Delays encountered in obtaining the permit(s) will not be a reason for extension of contract time.

For regulated commercial sources, the owner(s) shall bear the responsibility for meeting the requirements of the NPDES permitting process.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-107-10

CODE: (IS)

DATE: 3/1/99

SUBJECT: Contractor's Responsibility For Work

Section 107, Legal Relations and Responsibility to Public, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

After the second full paragraph of Subsection 107.17 on page 107-15, add the following:

Damage to items of construction, caused by the traveling public on a project or section(s) of a project open to traffic, shall be repaired by the Contractor. The Contractor will be paid for repairing such damage to certain acceptably installed items of construction at the contract unit price(s) for the applicable item(s) used in the repair. An acceptably installed item shall be complete-in-place meeting the requirements of the specifications. The acceptably installed items of construction eligible to receive payment for repair of damage caused by the traveling public shall be items used for signing, safety and traffic control. The eligible items shall be limited to traffic signal systems, signs and sign supports, lighting items, guard rail items, delineators, impact attenuators, median barriers, bridge railing or permanent pavement markings. If damage to the above items necessitate only minor repairs, in lieu of total replacement, the work shall be performed in accordance with Subsection 109.04, or as directed by the Engineer. Damage not meeting the requirements to qualify for repair payment shall be repaired at no additional cost to the State.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| SPECIAL PROVISION NO. 907-107-12

CODE: (IS)

| DATE: 10/21/2003

SUBJECT: Liability Insurance

Section 107, Legal Relations and Responsibility to Public, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-107.14.2--Liability Insurance.

Delete Subsection 107.14.2.1 on page 107-12 in toto and substitute:

907-107.14.2.1--General. The Contractor shall carry contractor's liability (including subcontractors and contractual) with limits not less than: \$300,000 each occurrence; \$1,000,000 aggregate; automobile liability - \$500,000 combined single limit - each accident; Workers' Compensation and Employers' Liability - Statutory & \$100,000 each accident; \$100,000 each employee; \$500,000 policy limit. Each policy shall be signed or countersigned by a Mississippi Resident Agent of the insurance company.

The Contractor shall have certificates furnished to the Department from the insurance companies providing the required coverage. The certificates shall be on the form furnished by the Department and will show the types and limits of coverage.

907-107.14.2.2--Railroad Protective.

Delete the last paragraph on page 107-12 and substitute:

Prior to starting any work on railroad property, the Contractor shall furnish satisfactory evidence to the Department that insurance of the forms and amounts set out herein in paragraphs (a) and (b) has been obtained.

Delete the last sentence of the first paragraph on page 107-13 and substitute:

Evidence to the Railroad Company shall be in the form of a Certificate of Insurance for coverages required in paragraph (b), and the original policy of the Railroad Protective Liability Insurance for coverage required in paragraph (a).

Delete the first sentence of the fourth paragraph on page 107-13 and substitute:

For work within the limits set out in 107.18 and this subsection, the Contractor shall provide insurance for bodily injury liability, property damage liability and physical damage to property with coverages and limits no less than shown in paragraphs (a) and (b).

Delete subparagraphs (a), (b) and (c) on pages 107-13 and 107-14 and substitute:

(a) **Railroad Protective Liability Insurance** shall be purchased on behalf of the Railroad Company with limits of \$2,000,000 each occurrence; \$6,000,000 aggregate applying separately to each annual period for lines without passenger trains. If the line carries passenger train(s), railroad protective liability insurance shall be purchased on behalf of the Railroad Company with limits of \$5,000,000 each occurrence; \$10,000,000 aggregate applying separately to each annual period.

Coverage shall be limited to damage suffered by the railroad on account of occurrences arising out of the work of the Contractor on or about the railroad right-of-way, independent of the railroad's general supervision or control, except as noted in paragraph 4 below.

Coverage shall include:

- (1) death of or bodily injury to passengers of the railroad and employees of the railroad not covered by State workmen's compensation laws,
- (2) personal property owned by or in the care, custody or control of the railroads,
- (3) the Contractor, or any of his agents or employees who suffer bodily injury or death as a result of acts of the railroad or its agents, regardless of the negligence of the railroads, and
- (4) negligence of only the following classes of railroad employees:
 - (i) any supervisory employee of the railroad at the job site
 - (ii) any employee of the railroad while operating, attached to, or engaged on, work trains or other railroad equipment at the job site which are assigned exclusively to the Contractor, or
 - (iii) any employee of the railroad not within (i) or (ii) above who is specifically loaned or assigned to the work of the Contractor for prevention of accidents or protection of property, the cost of whose services is borne specifically by the Contractor or Governmental authority.

(b) **Regular Contractor's Liability**, including subcontractors, XCU and railroad contractual with limits of \$1,000,000 each occurrence; \$2,000,000 aggregate. **Automobile** with limits of \$1,000,000 combined single limit any one accident; **Workers' Compensation and Employer's Liability** - statutory and \$100,000 each accident; \$100,000 each employee; \$500,000 policy limit. **Excess/Umbrella**

Liability \$5,000,000 each occurrence; \$5,000,000 aggregate. All coverage to be issued in the name of the Contractor shall be so written as to furnish protection to the Contractor respecting his operations in performing work covered by the contract. Coverage shall include protection from damages arising out of bodily injury or death and damage or destruction of property which may be suffered by persons other than the Contractor's own employees.

In addition, the Contractor shall provide for and on behalf of each subcontractor by means of a separate and individual liability and property damage policy to cover like liability imposed upon the subcontractor as a result of the subcontractor's operations in the same amounts as contained above; or, in the alternative each subcontractor shall provide same.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-107-13

CODE: (SP)

DATE: 11/13/2003

SUBJECT: Contractor's Protection Plan

Section 107, Legal Relations and Responsibility to Public, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete in toto Subsection 107.22.1 on page 107-17 and substitute:

907-107.22.1--Contractor's Protection Plan. At the preconstruction conference or prior to starting any work on the project, the Contractor shall submit to the Engineer for approval, an erosion control plan to supplement permanent erosion control work required under the contract. As a minimum, the plan shall include the following:

1. Plan profile sheets (11" x 17" or larger) of the entire project showing the locations of erosion control devices (pay items) such as silt fence, hay bales, silt basins, slope drains, etc. Also, showing the locations of other measures (absorbed items) such as brush barriers, diversion berms, etc. that the Contractor may elect to use to prevent siltation.
2. A plan for disposal of waste materials, if applicable.
3. A detailed schedule of operations at locations of high siltation potential to clearly indicate how siltation of streams, lakes and reservoirs and the interruption of normal stream flows will be held to a practical and feasible minimum.

The plan shall be updated as needed during the progress of the project. Work shall not be started until an erosion control plan is approved by the Engineer.

The Engineer will have the authority to suspend all work and/or withhold payments for failure of the Contractor to carry out provisions of the erosion control plan and/or proper maintenance thereof.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-108-20

CODE: (IS)

DATE: 1/02/2003

SUBJECT: Liquidated Damages Table

Section 108, Prosecution and Progress, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby modified as follows:

Delete the table in Subsection 108.07 on page 108-12, and substitute the following:

Schedule of Deductions for Each Day of Overrun in Contract Time

Original Contract Amount		Daily Charge Per Calendar Day
From More Than	To and Including	
\$ 0	\$ 100,000	\$ 140
100,000	500,000	200
500,000	1,000,000	300
1,000,000	2,000,000	400
2,000,000	5,000,000	650
5,000,000	10,000,000	750
10,000,000	-----	1,400

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| SPECIAL PROVISION NO. 907-108-25

CODE: (IS)

| DATE: 1/26/2004

SUBJECT: Determination and Extension of Contract Time

Section 108, Prosecution and Progress, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby modified as follows:

Delete in toto Subsection 108.06 on pages 108-7 through 108-11, and substitute the following:

907-108.06--Determination and Extension of Contract Time.

907-108.06.1--General. Unless otherwise indicated in the contract, contract time will be established on a time unit basis. The span of time allowed for the completion of the physical features of work included in the contract will be indicated in the contract documents as total number of time units allowed and will be known as "Contract Time." The completion date will not be specified but will be determined by the number of time units allowed for completing the work.

The span of time allowed in the contract is based on the quantities used for comparison of bids. If satisfactory fulfillment of the contract requires performance of work in greater quantities than those set forth in the proposal, the time allowed for completion will be increased in time units in the same ratio that the cost of the added work bears to the total value of the original contract unless it can be established that the extra work was of such character that it required more time than is indicated by the money value. In such cases, reasonable time will be allowed. Original contract value and/or time shall be understood to include work and/or time added or removed by supplemental agreement.

During the months of December, January and February, Time will only be assessed in the miscellaneous phase.

Except as required for the miscellaneous phase assessment, time will not be charged for Saturdays, Mississippi legal holidays as defined in the contract, and other Department recognized holidays unless the Contractor performs work. Time charges for Saturdays or the noted holidays will be assessed only to the phases on which the Contractor actually works.

Except as required for the miscellaneous phase assessment, time will not be charged for Sundays, even though the Contractor is permitted or required to perform work as provided by the contract.

Time will not be charged during any required waiting period for placement of permanent pavement markings as set forth in Subsection 618.03 provided all other work is complete except growth and coverage of vegetative items as provided in Subsection 210.01.

907-108.06.1.2--Contract Time Assessment. The time required to complete the work has been determined by using time units from one of the columns in the following TABLE OF TIME UNITS. Column A will be used for projects consisting primarily of earthwork; Column B will be used primarily for base and pavement projects; Column C will be used for projects consisting primarily of bridges and structures; and Column D will be used primarily for overlay projects. The column applicable to the contract will be indicated in the contract documents.

TABLE OF TIME UNITS

Month	Column A	Column B	Column C	Column D
January	5	5	6	7
February	5	6	7	8
March	9	9	11	13
April	13	14	14	17
May	17	19	19	19
June	19	20	22	19
July	21	22	23	18
August	21	22	23	18
September	20	20	22	17
October	15	17	17	15
November	10	11	11	12
December	5	5	5	7
Calendar Year	160	170	180	170

Allocation of time units for a fractional part of a month will be computed as a proportion of the listed time units for the applicable month.

Time unit assessment will be based on soil and weather conditions and other specific conditions cited in the contract. The Engineer will determine on each applicable day the extent that each work phase in progress could have been productive, regardless of whether the Contractor worked on that phase.

When the Contractor worked or could have worked eight hours or more on a phase, a maximum of eight hours will be shown as productive hours available for that phase.

A phase will not be considered for assessment unless at least four consecutive satisfactory hours are available prior to noon. If the Contractor elects to work on such a day, time will only be assessed in the phase(s) in which the Contractor actually works.

The "miscellaneous" phase will not be considered a controlling phase and used in the assessment of time units except when shown as the only phase in progress. Under this condition, time units,

monthly time units divided by monthly calendar days, will be assessed in accordance with the applicable column in the TABLE OF TIME UNITS.

Time unit assessment for controlling phases will be based on the Average Value per Time Unit (AVTU) of each phase that should be in progress. Time unit assessment for each phase will begin on the time unit number shown on the approved progress schedule for the beginning of the phase; or if work is commenced on a phase earlier than shown on the progress schedule, time unit assessment will begin on the first day of an estimate period following the previous period in which 15 percent of the value of a phase has been earned except a phase shall not commence in the months of December, January and February.

The AVTU of each controlling phase will continue to be included in the determination of available time units until the physical features of the phase have been satisfactorily completed or until the approved progress schedule indicates an interval of no activity. The AVTU of the phase will not be used for the assessment of time units during such an interval unless the Contractor actually works on the phase.

When the Engineer determines that a controlling phase has been completed as indicated above and there are no other controlling phase(s) in progress at that time, time units will be assessed based on the AVTU of the next immediately scheduled phase(s).

For each day during the contract time, except Sundays and Saturdays and holidays on which the Contractor does not work, the ratio of the AVTU of each phase scheduled to be in progress to the total AVTU of all the phases scheduled to be in progress will be determined. Each ratio thus determined will be multiplied by the satisfactory hours available for the respective phase.

The product thus determined for each phase will be the proportionate productive hours for that phase. The proportionate hours for each phase will be added and the sum divided by eight with the quotient rounded to the nearest one-tenth (0.1). This number will be the time unit assessment for that day unless the number (before rounding) is less than two-tenths (0.2) and the assessment is assigned as zero (0.0) time units.

The Engineer will maintain a daily cumulative assessment of available time units throughout the duration of contract time. When the cumulative time unit assessment is equal to the total number of allowed time units, contract time shall expire.

Each month the Engineer will furnish the Contractor with a report showing the number of available time units assessed during the estimate period and the cumulative time unit assessment to date. The Contractor should review the Engineer's report as to the accuracy of the assessment and confer with the Resident or Project Engineer to rectify any differences. Each should make a record of the differences, if any, and conclusions reached. In the event mutual agreement cannot be reached, the Contractor will be allowed a maximum of 15 calendar days following the ending date of the monthly report in question to file a protest Notice of Claim in accordance with the provisions of Subsection 105.17. Otherwise, the Engineer's assessment shall be final unless mathematical errors of assessment are subsequently found to exist.

The percentage elapsed time will be calculated as a direct ratio of the time units assessed or the number determined in the TABLE OF TIME UNITS, whichever is smaller, to the total time units provided in the contract.

The percent of completion of the work will be determined by the ratio of the value of the part of the work accomplished to the total contract amount.

When the progress of the work lags more than 20 percent behind the approved progress schedule or the schedule becomes unrealistic because soil and weather conditions have permitted work on some phases and not on others, the Contractor should immediately submit a revised schedule for approval in order that the Engineer's daily assessment will be based on a more realistic schedule.

The beginning date for the revisions on the schedule shall be the beginning date of the next report period after the submission. The revised progress schedule shall be accompanied by a written statement from the Contractor indicating any additional equipment, labor, materials, etc. to be assigned to the work to ensure completion within contract time. The total allowed time units shown on the revised progress schedule shall not exceed the total allowed time units in the original contract. Approval of the revised progress schedule shall in no way be construed as a waiver of the provisions of Subsection 108.07. In the event the Contractor does not submit an approvable revised progress schedule, the progress schedule in effect will continue to be used for the daily assessment of time units.

907-108.06.1.3--Extension of Time. If the Contractor finds it impossible, for reasons beyond the Contractor's control, to complete the work within the contract time or as extended in accordance with this subsection, the Contractor may, prior to the expiration of the Contract Time as extended, make a written request to the Engineer for an extension of time, justifying the granting of the request. The Contractor's plea that insufficient time was specified is not a valid reason for extension of time. If the Engineer finds that the work was delayed because of conditions beyond the control and without the fault of the Contractor, the time for completion may be extended in such amount as the conditions justify.

Revision to the contract time will be determined by adding the number of time units representing the calendar days of delay to the number of time units at the time of the extension.

If the completion of the project is extended into a season of the year in which completion of certain items would be prohibited or delayed because of seasonal or temperature limitations, the Engineer may waive the limitations provided the completion of the work will not result in reduced quality. When determined that completion of the items out-of-season will cause a reduction in the quality of the work, the completion of the project will be further extended so the items may be completed under favorable weather conditions. In either case, the Engineer will notify the Contractor in writing.

907-108.06.1.4--Cessation of Contract Time. When the Engineer in writing schedules a final inspection, time will be suspended until the final inspection is conducted. If during this inspection it is determined that all necessary items of work have not been completed, time

charges will resume. When final inspection has been made by the Engineer as prescribed in Subsection 105.16 and all items of work have been completed, the daily time charge will cease.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-109-8

CODE: (IS)

DATE: 9/8/95

SUBJECT: Claims

Section 109, Measurement and Payment, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

At the end of Section 109 on page 109-9, add the following:

907-109.12--Right to Audit. The Department reserves the right to audit the Contractor's records at any time during the contract period and up to three years after the final contract payment or up to three years after any litigation is filed with court, whichever is later. If the Department commences an audit, the Contractor will be required to provide sufficient original documents and records to satisfy the Department's Audit Division that the costs included in the Contractor's claim were incurred solely in performance of the referenced project and project phase and were not incurred on any other project or phase of the referenced project that the Contractor is constructing or has constructed. Department's audit will be conducted in accordance with United States General Accounting Office's Governmental Auditing Standards, the Institute of Internal Auditor's Professional Practice Standards, and the American Institute of Certified Public Accountant's Auditing Standards.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| SPECIAL PROVISION NO. 907-109-14

CODE: (IS)

| DATE: 12/12/2002

SUBJECT: Measurement and Payment for Changes in Costs of Construction Materials (Fuels and Asphalt)

Section 109, Measurement and Payment, of the 1990 Edition of the Standard Specifications for Road and Bridge Construction, is hereby amended as follows:

Delete line 9, page 109-8 and add the following subsection:

907-109.07 - Changes in Material Costs. Because of the uncertainty in estimating the costs of petroleum products that will be required during the life of a contract, adjustment in compensation for certain materials is provided as follows:

Bituminous Products--Each month the Department will acquire unit prices from producers or suppliers who supply the State highway construction industry with bituminous products. The average of all quotes for each product will serve as the base price for contracts let in the subsequent month.

Fuels--Selected cash price quotations for bulk gasoline and diesel fuel will be taken from Platt's Oilgram PAD 2 and PAD 3. The appropriate adjustment per gallon for gasoline and diesel fuel will be added to the quotations to allow for taxes and markups. The prices thus determined will serve as the base prices for contracts let in the subsequent month.

The established base prices for bituminous products and fuels will be included in the contract documents under a Notice to Bidders entitled "Petroleum Products Base Prices For Contracts Let In (Month and Year)."

Each month thereafter the Engineer will be furnished with the current monthly prices. Adjustments for change in cost will be determined from the difference in the contract base prices and the prices for the period that the work is performed and for the quantities completed provided the price change in a product is more than five percent. Adjustments may increase or decrease compensation depending on the difference between the base prices and prices for the estimate period.

The adjustments will be determined for the quantities of bituminous products and the average fuel requirements for processing a unit of work as set forth herein.

COST ADJUSTMENT FACTORS FOR FUEL USAGE

<u>Item of Work</u>	<u>Units</u>	<u>Code</u>	<u>Diesel</u>	<u>Gasoline</u>
Excavation & Embankment (Except Structure and Foundation)	gallons/cubic yard	(E)	0.29	0.15
Granular Materials, Stabilizer Aggregates or Coarse & Seal Aggregates	gallons/cubic yard or gallons/ton	(GY) (GT)	0.88 0.62	0.57 0.40
Subgrade & Base Mixing Items	gallons/square yard	(M)	0.044	0.028
Hot Mix Asphalt (HMA)	gallons/ton	(B)	2.57	0.78
Asphalt Drainage Course	gallons/square yard	(D)	0.49	0.15
Portland Cement Concrete Base & Pavement	gallons/square yard	(C)	0.11	0.15
Bridge Items, Structural Concrete, Pipe Culverts, (Including Foundation & Structural Excavation and all other Concrete related items)	gallons/\$1000	(S)	11.0	13.0

CONSTRUCTION MATERIALS

The items and quantities subject to compensation adjustment:

ADJUSTMENT CODE

- (A1) Asphalt for HMA mixture -- theoretical gallons based on job mix formula and unit weight of 8.43 pounds per gallon (new asphalt only for recycled HMA mixture).
- (A2) Asphalt for Surface Treatment -- pay quantity in gallons.
- (A3) Asphalt for Prime -- pay quantity in gallons.
- (A4) Asphalt for Curing Seal -- 0.25 gallons per square yard.
- (A5) Asphalt for Bituminous Treated Roving -- 0.50 gallons per square yard.
- (A6) Asphalt for Asphalt Drainage Course -- theoretical gallons per square yard based on job mix formula and unit weight of 8.43 pounds per gallon.

Any difference between checked final quantity and the sum of quantities shown on the monthly estimates for any item will be adjusted by the following formula:

$$\text{FA} = (\text{FCQ} - \text{PRQ}) \times \text{EA}$$

Where

- FA = Final Adjustment
- FCQ = Final Checked Quantity
- PRQ = Total Quantity Previously Reported on Monthly Estimate
- EA = Total Adjustment Shown on Monthly Estimate

The final adjustment is to consider any error(s) that may have been made in the computations of monthly adjustments.

After the expiration of contract time, including all authorized extensions, adjustments will be computed using fuel and material prices that are in effect at the expiration of contract time.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-109-15

DATE: 02/13/2004

SUBJECT: Retainage

Delete Subsection 907-109.06.3 on page 2 and substitute the following.

907-109.06.3--Retainage. Regardless of the value of the earned work based on the value of work scheduled for completion by the approved progress schedule, no deduction for retainage will be made from payments and advancement of materials due to the Contractor. Likewise, the Contractor shall not withhold any retainage from any payments due to a Subcontractor or Supplier.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| SPECIAL PROVISION NO. 907-109-15

CODE: (IS)

| DATE: 01/05/2004

SUBJECT: Measurement and Payment

Section 109, Measurement and Payment, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-109.06.2--Advancement on Materials. After the first sentence of the first paragraph of Subsection 109.06.2 on page 109-6, add the following:

Advance payment may be requested for structural steel members provided fabrication has been completed and the members have been declared satisfactory for storage by a Department representative.

Remove the period at the end of the third sentence of the first paragraph of Subsection 109.06.2 on page 109-6 and add the following:

; or in the case of prestressed concrete members that may require being produced at an out-of-state location, the prestress members shall be produced and may be stored at the commercial manufacturer's yard provided it is a PCI certified plant on the Department's List of Approved Prestress & Precast Plants and it is located within the continental United States; or in the case of structural steel members that may require fabrication at an out-of-state location, the fabricated members may be stored at the location of the commercial fabricator's yard provided it is located within the continental United States.

Delete the second paragraph of Subsection 109.06.2 on page 109-6 and substitute the following:

Advancements will not be allowed until the Project Engineer has received triplicate copies of material invoices and certified test reports or acceptable certificates of conformance, and in the case of materials stored at the commercial producer's/fabricator's yard, the material shall be positively identified for the specific project and a Certificate of Storage issued by the State Materials Engineer, another designated Department employee or a designated representative of the Department. Requests for advancements on fabricated structural steel members and prestress concrete members stored out-of-state will be denied when the Department does not have available a designated representative to issue a Certificate of Storage.

Delete the first sentence of the third paragraph of Subsection 109.06.2 on page nos. 109-6 and 109-7 and substitute the following:

The Contractor shall make suitable arrangements to the satisfaction of the Engineer for storage and protection at approved sites or, in the case of materials stored at the commercial producer's yard located in Mississippi or, in the case of fabricated structural steel members stored at the

commercial fabricator's yard or prestress concrete members stored at a commercial manufacturer's yard located within the continental United States, the Contractor shall make arrangements with the producer/fabricator for suitable storage and protection.

Delete the second full paragraph on page 109-7, and substitute:

Unless specifically provided for in the contract, advance payment will not be made on materials, except for fabricated structural steel members or prestress concrete members, stored or stockpiled outside of the State of Mississippi.

Delete in toto Subsection 109.06.3 on pages 109-7 and 109-8, and substitute the following:

907-109.06.3--Retainage. Regardless of the value of the earned work based on the value of work scheduled for completion by the approved progress schedule, no deduction for retainage will be made from payments due to the Contractor. Likewise, no retainage will be made on any advancement of materials to the Contractor.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-203-15

CODE: (IS)

DATE: 11/26/2002

SUBJECT: Excavation and Embankment

Section 203, Excavation and Embankment, of the 1990 Edition of Mississippi Standard Specifications for Road and Bridge Construction, is hereby amended as follows:

907-203.03--Construction Requirements.

907-203.03.8.7--Compaction of Embankments. Delete the fifth paragraph of Subsection 203.03.8.7 on page 203-11 and substitute the following:

For basement and design soils, the required density shall be 95.0 percent and 98.0 percent, respectively. If a density test fails within minus two percent (-2.0%), 93.0 to 95.0% or 96.0 to 98.0%, of the required density, a verification test will be performed and the average of the two tests will be the test value for the lot. If this test value does not meet the required density (95.0 or 98.0%), the lot shall be rejected. If the original test value exceeds minus two percent (-2%) of the required density, no verification test will be performed and the lot shall be rejected.

907-203.05--Basis of Payment. Delete the first, fifth, and ninth pay item, description and unit of measure shown on page 203-13, and substitute the following:

907-203-A: Unclassified Excavation (_____) - per cubic yard
FM or LVM

907-203-E: Borrow Excavation (_____) (Class _____) - per cubic yard
FM, FME or LVM

907-203-EX: Borrow Excavation (AH) (_____) (Class _____) - per cubic yard
FME or LVM

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-225-2

CODE: (SP)

DATE: 07/10/2002

SUBJECT: Grassing

Section 907-225, Grassing, is hereby added to the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows:

SECTION 907-225 -- GRASSING

907-225.01--Description. This work consists of furnishing, transporting, placing, plant establishment and all work necessary to produce a satisfactory and acceptable growth of grass. This work includes ground preparation, fertilizing, seeding and mulching necessary to establish a satisfactory growth of grass.

Ground preparation, light or standard, consists of plowing, loosening, and pulverizing the soil to form suitable beds for erosion control items in reasonably close conformity with the established lines and grades without appreciable humps or depressions.

Fertilizing work consists of furnishing, transporting, spreading, and incorporating fertilizers.

Seeding consists of furnishing and planting seeds in a prepared seedbed; covering the seeds and compacting the seedbed; and providing plant establishment on all areas seeded. All the work shall be in accordance with the plans and these specifications.

Mulching consists of furnishing, transporting, placing, and anchoring vegetative mulch on slopes, shoulders, medians, and other designated areas.

907-225.02--Materials.

907-225.02.1--Fertilizers. Fertilizers for purposes of these specifications shall be understood to include standard manufactured products consisting of single or combination ingredients and agricultural limestone.

All fertilizer shall comply with the State fertilizer laws and the requirements of these specifications.

Fertilizers shall meet the requirements of Subsection 715.02.

907-225.02.2--Seeds. Seeds shall meet the requirements of Subsection 715.03, subject to the provisions of this subsection. The Contractor shall acquire seed from persons registered with the Mississippi Department of Agriculture and Commerce.

Except for the germination requirements, bags of seeds properly labeled or tagged according to law and indicating characteristics meeting or exceeding the requirements of Subsection 715.03 will be acceptable for planting.

The Contractor should provide adequate dry storage facilities for seeds, and shall furnish access to the storage for sampling stored seed.

907-225.02.3--Mulching. The vegetative materials for mulch shall meet the requirements of 715.05.

Bituminous material for mulch shall be Emulsified Asphalt, Grade SS-1, meeting the requirement of Subsection 702.07.

907-225.03--Construction Requirements.

907-225.03.1--Ground Preparation.

907-225.03.1.1--General. Any equipment used for ground preparation shall be approved units suitable to perform the work and subject to the requirements of 108.05.

The Contractor shall take full advantage of weather and soil conditions, and no attempt shall be made to prepare soil when it is wet or in an otherwise non-tillable condition.

Light ground preparation should be used on areas where seeding is required to improve the coverage of partially vegetated areas.

Standard ground preparation should be used on areas designated to be solid sodded and unvegetated areas designated to be seeded.

907-225.03.1.2--Light Ground Preparation. Light ground preparation consists of scratching the surface with a close-tooth harrow, disk-harrow, or similar equipment. The depth of scratching should be at least three-quarters inch but not deep enough to damage existing grasses of the type being planted.

907-225.03.1.3--Standard Ground Preparation. Standard ground preparation consists of plowing or disk-harrowing and thoroughly pulverizing the areas immediately before the application of erosion control (vegetative) items. Unless otherwise specified, the pulverized and prepared seedbed should be at least four inches deep and shall be reasonably free of large clods, earthballs, boulders, stumps, roots and other objectionable matter. Incorporation of fertilizer and ground preparation may be performed simultaneously.

Aerating, moistening, or otherwise bringing the soil to a suitable condition for ground preparation shall be considered as incidental to the work and will not be measured for separate payment.

907-225.03.2--Fertilizing. The Contractor shall furnish all equipment necessary to properly handle, store, uniformly spread, and incorporate the specified application of fertilizer.

The Contractor shall incorporate bag fertilizer at a rate of 1000 pounds per acre of 13-13-13 commercial fertilizer. The equivalent rate of other type fertilizers will be allowed if the equivalent percentages of Nitrogen, Phosphorus and Potassium are obtained. The Contractor shall incorporate agricultural limestone at a rate of 5000 pounds per acre. Fertilization shall be applied uniformly on the areas to be planted or seeded and uniformly incorporated into the soil.

Fertilizers should be applied on individual areas of not more than three acres.

All fertilizer should be incorporated within 24 hours following spreading.

907-225.03.3--Seeding.

907-225.03.3.1--General. Prior to planting the seeds, ground preparation and fertilizing should have been satisfactorily performed.

Seeding may be required for temporary protection or for establishment of permanent ground cover. The plans will indicate temporary seeding.

The required type of seeds, **minimum** rates of application and planting dates of seeds are shown in the vegetation schedule on the plans. It is the Contractor's responsibility to apply an ample amount of each type of seed to produce a satisfactory growth of grass and of the seed type required. At the completion of the project, a satisfactory growth of grass will be required. Reference Subsection 210 for satisfactory growth and coverage of dormant seed.

Legume seeds should be treated in accordance with Subsection 715.03.4 immediately before sowing. Seeds should be uniformly sown over the entire area with mechanical seeders. Seeds of different sizes may necessitate separate sowing. When legume seeds become dry, they should be reinoculated.

Seeding should not be done during windy weather or when the ground is frozen, extremely wet, or in an untillable condition.

All seeds should be covered lightly with soil by raking, rolling, or other approved methods, and the area compacted with a cultipacker.

Mulching should be performed as soon as practicable.

907-225.03.3.2--Plant Establishment. The Contractor should provide plant establishment on all areas seeded until release of maintenance.

Plant establishment should be provided for a minimum period of 45 calendar days after completion of seeding. In the event satisfactory growth and coverage has not been attained by the end of the 45-day period, plant establishment should be continued until a satisfactory growth and coverage is provided for at least one kind of plant (reference is made to Section 210). The Contractor shall perform plant establishment on all areas of temporary seeding until the Engineer determines that the temporary seeding has served its purpose.

Plant establishment shall consist of preserving, protecting, watering, reseeding, mowing, and other work necessary to keep the seeded areas in satisfactory condition.

Areas requiring reseeding should be prepared and seeded and all other work performed as if the reseeding was the initial seeding. The types and application rates of fertilizer will be at the discretion of the Contractor.

907-225.03.3.3--Growth and Coverage. It shall be the Contractor's responsibility to provide satisfactory growth and coverage of grasses, legumes, or combination produced from the specified seeding.

Growth and coverage on seeded areas will be considered to be in reasonably close conformity with the intent of the contract when the type of vegetation specified, exclusive of that from seeds not expected to have germinated and shows growth at that time, has reached a point of maturity where stems or runners overlap adjacent similar growth in each direction over the entire area.

907-225.03.4--Mulching.

907-225.03.4.1--Equipment. Mulching equipment should be capable of maintaining a constant air stream which will blow or eject controlled quantities of mulch in a uniform pattern. If asphalt is used, a jet or spray nozzle for applying uniform, controlled amounts of asphalt to the vegetative material as it is ejected should be located at or near the discharge spout.

Mulch stabilizers should consist of dull blades or disks without camber and approximately 20 inches in diameter. The disks should be notched, should be spaced at approximately 8 inch intervals, and should be equipped with scrapers. The stabilizer should weigh approximately 1000-1200 pounds, should have a working width of no more than eight feet, and should be equipped with a ballast compartment, so that weight can be increased.

907-225.03.4.2--Placement of Vegetative Mulch. Mulching should be placed uniformly on designated areas within 24 hours following seeding unless weather conditions are such that mulching cannot be performed. Placement should begin on the windward side of areas and from tops of slopes. In its final position, the mulch should be loose enough to allow air to circulate but compact enough to partially shade the ground and reduce erosion.

The baled material should be loosened and broken thoroughly before it is fed into the machine to avoid placement of unbroken clumps.

907-225.03.4.3--Rates of Application and Anchoring Mulch. The Contractor will designate the rate of application of vegetative mulch. The mulch should be anchored by either the use of a mulch stabilizer or by tacking with bituminous material. If a mulch stabilizer is used, the mulch should be punched into the soil for a minimum depth of one inch. If bituminous material is used, the rate of application should be 150 gallons per acre.

Where steep slopes or other conditions are such that anchoring cannot be performed satisfactory with a mulch stabilizer, the Contractor may elect to use bituminous material applied at the time or immediately following the mulch placement.

When mulch stabilizers are used, anchoring the mulch should be performed along the contour of the ground surface.

907-225.03.4.4--Protection and Maintenance. The Contractor should maintain and protect mulched areas until release of maintenance of the project. The Contractor should take every precaution to prevent unnecessary foot and vehicular traffic.

The Contractor should mow or otherwise remove or destroy any undesirable growth on all areas mulched to prevent competition with the desired plants and to prevent reseeding of undesirable growth.

907-225.04--Method of Measurement. Grassing, complete and accepted, will be measured by the acre. Acceptance will be based on a satisfactory growth and coverage of seeds planted.

907-225.05--Basis of Payment. Grassing, measured as prescribed above, will be paid for at the contract unit price per acre, which will be full compensation for all required materials, equipment, labor, testing and all work necessary to establish a satisfactory growth of grass.

Payment will be made under:

907-225-A: Grassing - per acre

907-225-B: Agricultural Limestone - per ton

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-234-1

CODE: (IS)

DATE: 12/10/2001

SUBJECT: Silt Fence

Section 907-234, Silt Fence, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby modified as follows:

907-234.05--Basis of Payment. Add the “907” prefix to the pay items listed on page 234-2.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-401-23

DATE: 10/24/2003

SUBJECT: Hot Mix Asphalt (HMA)

Delete the second paragraph of Subsection 907-401.02.3.1 and substitute the following:

The total amount of crushed limestone aggregate for mixtures, excluding 4.75 mm mixtures, when used in the top lift, shall not exceed 50 percent of the total combined aggregate by weight.

Delete the compaction requirements in Subsection 907-401.02.3.2 and substitute the following:

Compaction Requirements:	N _{Initial}	N _{Design}	N _{Maximum}
High Type (HT) Mixtures (19 mm, 12.5 mm, 9.5 mm & 4.75 mm)	7	85	130
Medium Type (MT) Mixtures (19 mm, 12.5 mm, 9.5 mm & 4.75 mm)	7	65	100
All Standard Type (ST) Mixtures; 25 mm HT & MT Mixtures	6	50	75

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-401-23

CODE: (SP)

DATE: 02/21/2003

SUBJECT: Hot Mix Asphalt (HMA)

Section 401, Plant Mix Pavements-General, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is deleted in toto and replaced as follows:

SECTION 907-401 - HOT MIX ASPHALT (HMA) - GENERAL

907-401.01--Description. These specifications include general requirements that are applicable to all types of HMA along with the specific requirements for each particular mixture when deviations from the general requirements are necessary.

This work consists of the construction of one or more lifts of HMA in accordance with these specifications and the specific requirements for the mixture to be produced and in reasonably close conformity with the lines, grades, thicknesses and typical sections shown on the plans or established by the Engineer.

907-401.01.1--Definitions.

Maximum Sieve Size - Maximum sieve size is the smallest sieve size at which 100 percent of the aggregate passes.

Nominal Maximum Sieve Size - The nominal maximum sieve size is one sieve size larger than the first sieve to retain more than 10 percent of the aggregate.

Maximum Density Line - The maximum density line is a straight line plot on the FHWA 0.45 power gradation chart which extends from the zero origin point of the chart through the plotted point of the combined aggregate gradation curve on the nominal maximum sieve size.

Mechanically Fractured Face - An angular, rough, or broken surface of an aggregate particle created by crushing as determined by ASTM Designation: D 5821.

907-401.02--Materials.

907-401.02.1--Component Materials.

907-401.02.1.1--General. Component materials will be conditionally accepted at the plant subject to later rejection if incorporated in a mixture or in work which fails to meet contract requirements.

907-401.02.1.2--Aggregates. The source of aggregates shall meet the applicable requirements of Section 907-703.

907-401.02.1.2.1--Coarse Aggregate Blend. Mechanically fractured faces by weight of the combined mineral aggregate coarser than the No. 4 sieve:

<u>Mixture</u>	<u>Percent Fractured Faces, minimum</u>
25 mm	70 (one face)
19 mm*	80 (one face)
12.5 mm	90 (two face)
9.5 mm	90 (two face)
4.75 mm	90 (two face)

* When used on routes requiring polymer modified asphalt, the top intermediate lift (19 mm mixture), including travel lane and adjacent lane, shall have at least 90 percent two fractured faces minimum. When placed on an existing Portland Cement Concrete surface, all intermediate lifts (19 mm mixture) shall have at least 90 percent fractured two faces minimum.

The maximum percentage by weight of flat and elongated particles, for all mixes other than 4.75 mm, maximum to minimum dimension greater than 5, shall not exceed 10% for all mixtures. This shall be determined in accordance with ASTM D 4791, Section 8.4, on the combined mineral aggregate retained on the 3/8" sieve.

907-401.02.1.2.2--Fine Aggregate Blend. Of all the material passing the No. 8 sieve and retained on the No. 200 sieve, not more than 60 percent shall pass the No. 30 sieve.

Uncrushed natural sand shall pass the 3/8" sieve and may be used, excluding the content in RAP, in the percentages of the total mineral aggregate by weight set out in the following table:

Mixture	Maximum Percentage of Natural Sand by Total Weight of Mineral Aggregate		
	HT	MT	ST
25 mm	10	10	20
19 mm	10	10	20
12.5 mm	10	10	20
9.5 mm	10	10	10
4.75 mm	25	30	35

907-401.02.1.2.3--Combined Aggregate Blend.

Design Master Range

Mixture:	25 mm	19 mm	12.5 mm	9.5 mm	4.75 mm
Nominal Maximum Sieve Size:	<u>1 inch</u>	<u>3/4 inch</u>	<u>1/2 inch</u>	<u>3/8 inch</u>	<u>1/4 inch</u>
<u>Sieve Size</u>	<u>Percent Passing</u>				
1-1/2 inch	100				
1 inch	90-100	100			
3/4 inch	89 max.	90-100	100		
1/2 inch	-	89 max.	90-100	100	100
3/8 inch	-	-	89 max.	90-100	95-100
No. 4	-	-	-	89 max.	90-100
No. 8	16-50	18-55	20-60	22-70	-
No. 16	-	-	-	-	30-60
No. 200	4.0-9.0	4.0-9.0	4.0-9.0	4.0-9.0	6.0-12.0

For MT and HT mixtures, the combined aggregate gradation of the job mix formula, when plotted on FHWA 0.45 power chart paper, shall fall entirely below the Maximum Density Line on all sieve sizes smaller than the No. 4 sieve. However, MT and HT mixtures having a minimum fine aggregate angularity index of 44.0 (ASTM C1252, Method A) may be designed above the maximum density line.

The 9.5 mm mixtures shall have a minimum fine aggregate angularity of 44.0 for HT and MT mixtures and 40.0 for ST mixtures when tested on combined aggregate in accordance with ASTM C1252 Method A. The 4.75 mm mixtures shall have a minimum fine aggregate angularity of 45.0 for all design levels when tested on combined aggregate in accordance with ASTM C 1252, Method A.

The minus No. 40 fraction of the combined aggregate shall be non-plastic when tested according to AASHTO T 90. The clay content for the combined aggregate used in underlying layers shall not exceed 1.0 percent, and when used in top layers shall not exceed 0.5 percent by weight of the total mineral aggregate when tested according to AASHTO T 88.

907-401.02.1.3--Bituminous Materials. Bituminous materials shall meet the applicable requirements of Section 907-702 for the grade specified.

Tack coat shall be the same neat grade asphalt cement used in the mixture being placed or those materials specified for tack coat in Table 410-A on the last page of Section 410. Emulsified asphalt shall not be diluted without approval of the Engineer.

907-401.02.1.4--Blank.

907-401.02.1.5--Hydrated Lime. Hydrated lime shall meet the requirements of 714.03.2 for lime used in soil stabilization.

907-401.02.1.6--Asphalt Admixtures. Additives for liquid asphalt, when required or permitted, shall meet the requirements of Subsection 702.08.

907-401.02.1.7--Polymers. Polymers for use in polymer modified HMA pavements shall meet the requirements of Subsection 907-702.08.3.

907-401.02.2--Blank.

907-401.02.3--Composition of Mixtures.

907-401.02.3.1--General. Unless otherwise specified or permitted, the HMA shall consist of a uniform mixture of asphalt, aggregate, hydrated lime and, when required or necessary to obtain desired properties, antistripping agent and/or other materials.

The total amount of crushed limestone aggregate for HT mixtures, excluding 4.75 mm mixtures, when used in the top lift, shall not exceed 50 percent of the total combined aggregate by weight.

Hydrated lime shall be used in all HMA at the rate of one percent (1%) by weight of the total dry aggregate including aggregate in RAP, if used. The aggregate, prior to the addition of the hydrated lime, shall contain sufficient surface moisture. If necessary, the Contractor shall add moisture to the aggregate according to the procedures set out in Subsection 907-401.03.2.1.2.

The Contractor shall obtain a shipping ticket for each shipment of hydrated lime. The Contractor shall provide the District Materials Engineer with a copy of each shipping ticket from the supplier, including the date, time and weight of hydrated lime shipped.

Mixtures will require the addition of an antistripping agent when the Tensile Strength Ratio (MT-63) and/or the Boiling Water Test (MT-59) fail to meet the following criteria.

Tensile Strength Ratio (TSR - MT-63)	
Wet Strength / Dry Strength	85 percent minimum
Interior Face Coating	95 percent minimum
Boiling Water Test (MT-59)	
Particle Coating	95 percent minimum

Reclaimed asphalt pavement (RAP) materials may be used in the production of HMA in the percentages of the total mix by weight set out in the following table:

HMA Mixture	Maximum percent RAP by total weight of mix
4.75 mm	0
9.5 mm	15
12.5 mm Top Lift	15
12.5 mm Underlying Lift	30
19 mm	30
25 mm	30

During HMA production, the RAP shall pass through a maximum 2-inch square sieve located in the HMA plant after the RAP cold feed bin and prior to the RAP weighing system.

Crushed reclaimed concrete pavement may be used as an aggregate component of all HMA pavements. When crushed reclaimed concrete pavement is used as an aggregate component, controls shall be implemented to prevent segregation. Crushed reclaimed concrete pavement aggregate shall be separated into coarse and fine aggregate stockpiles using the 3/8-in or 1/2-in sieve as a break-point unless otherwise approved by the Engineer in writing.

907-401.02.3.1.1--Mixture Properties.

<u>ALL MIXTURES</u>	<u>Percent of Maximum Specific Gravity (Gmm)</u>
N_{Design}	96.0
$N_{Initial}$	Less than 90.0
$N_{Maximum}$	Less than 98.0
<u>VMA CRITERIA</u>	<u>Minimum percent</u>
25-mm mixture	12.0
19-mm mixture	13.0
12.5-mm mixture	14.0
9.5-mm mixture	15.0
4.75 mm mixture	16.0

Mixtures with VMA more than two percent higher than the minimum may be susceptible to flushing and rutting; therefore, unless satisfactory experience with high VMA mixtures is available, mixtures with VMA greater than two percent above the minimum should be avoided.

The specified VFA range for 4.75 mm nominal maximum size mixtures for design traffic levels >3 million ESAL's (HT Mixtures) shall be 75 to 78 percent, for design traffic levels of 1.0 to 3 million ESAL's (MT mixtures) 65 to 78 percent, and for design traffic levels of <1.0 million ESAL's (ST mixtures) 65 to 78 percent.

DUST/BINDER RATIO (4.75 mm)

(Percent Passing No.200 / Effective Binder Percent)	0.9 to 2.0
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DUST/BINDER RATIO (9.5 mm, 12.5 mm, 19 mm & 25mm)

(Percent Passing No.200 / Effective Binder Percent)	0.8 to 1.6
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907-401.02.3.2--Job Mix Formula. The job mix formula shall be established in accordance with Mississippi Test Method: MT-78, where N represents the number of revolutions of the gyratory compactor.

Compaction Requirements:	N _{Initial}	N _{Design}	N _{Maximum}
High Type (HT) Mixtures (19 mm, 12.5 mm, 9.5 mm & 4.75 mm)	7	85	130
Medium Type (MT) Mixtures (25 mm, 19 mm, 12.5 mm, 9.5 mm & 4.75 mm)	7	65	100
All Standard Type (ST) Mixtures; 25 mm HT Mixtures	6	50	75

At least 10 working days prior to the proposed use of each mixture, the Contractor shall submit in writing to the Engineer a proposed job-mix formula or request the transfer of a verified job-mix formula as set forth in the latest edition of MDOT's Field Manual for HMA and TMD-11-78-00-000. The job-mix formula shall be signed by a Certified Mixture Design Technician (CMDT).

The Department will perform the tests necessary for review of a proposed job-mix formula for each required mixture free of charge one time only. A charge will be made for additional job-mix formulas submitted by the Contractor for review.

Review of the proposed job-mix formula will be based on percent maximum specific gravity at N_{Initial}, N_{Design}, and N_{Maximum}, VMA @ N_{Design}, resistance to stripping, and other criteria specified for the mixture.

The mixture shall conform thereto within the range of tolerances specified for the particular mixture. No change in properties or proportion of any component of the job-mix formula shall be made without permission of the Engineer. The job-mix formula for each mixture shall be in effect until revised in writing by the Engineer.

A job-mix formula may be transferred to other contracts in accordance with conditions set forth in the Department's Field Manual for HMA.

The Contractor shall not place any HMA prior to receiving "tentative" approval and a MDOT design number from the Central Laboratory.

When a change in source of materials, unsatisfactory mixture production results (such as segregation, bleeding, shoving, rutting over ?", raveling & cracking) or changed conditions make it necessary, a new job-mix formula will be required. The conditions set out herein for the original job-mix formula are applicable to the new job-mix formula.

907-401.02.4--Substitution of Mixture. The substitution of a one (1) size finer mixture for an underlying lift shall require written permission of the State Construction Engineer, except no substitution of a 4.75 mm mixture will be allowed. A 9.5 mm mixture may be substituted for the 12.5 mm mixture designated on the plans as the top lift or pre-leveling. The 19 mm mixture may be substituted for the 25 mm mixture in trench widening work. Any substitution of mixtures shall be of the same type. No other substitutions will be allowed. The quantity of substituted mixture shall be measured and paid for at the contract unit price for the mixture designated on the plans. The substitution of any mixture will be contingent on meeting the required total structure thickness and maintaining the minimum and/or maximum laying thickness for the particular substituted mixture as set out in the following table.

Mixture	Single Lift Laying Thickness (Inches)	
	Minimum	Maximum
25 mm	3	4
19 mm	2 ¼	3
12.5 mm	1 ½	2
9.5 mm	1	1 ½
4.75 mm	½	¾

907-401.02.5--Contractor's Quality Management Program.

907-401.02.5.1--General. The Contractor shall have full responsibility for quality management and maintain a quality control system that will furnish reasonable assurance that the mixtures and all component materials incorporated in the work conform to contract requirements. The Contractor shall have responsibility for the initial determination and all subsequent adjustments in proportioning materials used to produce the specified mixture. Adjustments to plant operation and spreading and compaction procedures shall be made immediately when results indicate that they are necessary. Mixture produced by the Contractor without the required testing or personnel on the project shall be subject to removal and replacement by the Contractor at no additional cost to the State.

907-401.02.5.2--Personnel Requirements. The Contractor shall provide at least one Certified Asphalt Technician-I (CAT-I) full-time during HMA production at each plant site used to furnish material to the project. Sampling shall be conducted by a certified technician or by plant personnel under the direct observation of a certified technician. All testing, data analysis and data posting will be performed by the CAT-I or by an assistant under the direct supervision of the CAT-I. The Contractor shall have a Certified Asphalt Technician-II (CAT-II) available to make any necessary process adjustments. Technician certification shall be in accordance with MDOT SOP TMD-22-10-00-000, MDOT HMA Technician Certification Program. An organizational chart, including names, telephone numbers and current certification, of all those

responsible for the quality control program shall be posted in the contractor's laboratory while the asphaltic paving work is in progress.

907-401.02.5.3--Testing Requirements. As a minimum, the Contractor's quality management program shall include the following:

- (a) Bituminous Material. Provide Engineer with samples in a sealed one quart metal container at the frequency given in MDOT SOP TMD-20-04-00-000.
- (b) Mechanically Fractured Face. Determine mechanically fractured face content of aggregates retained on the No. 4 sieve, **at a minimum** of one test per day of production.
- (c) Mixture Gradation. Conduct extraction tests for gradation determination on the mixture. Sample according to the frequency in paragraph (i) and test according to Mississippi Test Method MT-31.
- (d) Total Voids and VMA. Determine total voids and voids in mineral aggregate (VMA), at N_{Design} , from the results of bulk specific gravity tests on laboratory compacted specimens. Sample according to the sampling frequency in paragraph (i) and test according to the latest edition of MDOT's Field Manual for HMA.
- (e) Asphalt Content. **Sample according to the sampling frequency in paragraph (i).** Determine the asphalt content using one of the following procedures.
 - (1) Nuclear gauge. (Mississippi Test Method MT-6)
 - (2) Incinerator oven. (AASHTO T 308, Method A)
- (f) Stripping Tests. Conduct a minimum of one stripping test at the beginning of each job-mix production and thereafter, at least once per each two weeks of production according to Mississippi Test Method: MT-63 and one stripping test per day of production according to Mississippi Test Method: MT-59. Should either the TSR (MT-63) or the boiling water (MT-59) stripping tests fail, a new antistrip additive or rate shall be established or other changes made immediately that will result in a mixture which conforms to the specifications; otherwise, production shall be suspended until corrections are made.
- (g) Density Tests. **For 25 mm, 19.5 mm, 12.5 mm & 9.5 mm mixtures, conduct** density tests as necessary to control and maintain required compaction according to Mississippi Test Method: MT-16, Method C (nuclear gauge), or AASHTO T 166. (Note - The nuclear gauge may be correlated, at the Contractor's option, with the average of a minimum of five pavement sample densities.) **For 4.75 mm mixtures, conduct density tests as necessary to control and maintain required compaction according to AASHTO Designation: T 166.**
- (h) Quality Control Charts. Plot the individual test data, the average of the last four tests and the control limits for the following items as a minimum:
 - Mixture Gradation (Percent Passing) Sieves:
 - 1/2-in, 3/8-in, No. 8, **No. 16**, No. 30 and No. 200.
 - Asphalt Content, Percent
 - Maximum Specific Gravity, G_{mm}
 - Total Voids @ N_{Design} , Percent
 - VMA @ N_{Design} , Percent

NOTE: For 4.75 mm mixtures, Quality Control Charts for mixture gradation are not required on the No. 8 and No. 30 sieves. For 4.75 mm mixtures, as a minimum, Quality Control Charts for mixture gradation shall be kept on the 3/8-in, No. 16 and No. 200 sieves. For all mixtures other than 4.75 mm, Quality Control Charts for mixture gradation are not required on the No. 16 sieve.

Keep charts up-to-date and posted in a readily observable location. Charts may be kept on a computer, however, the charts shall be printed out a minimum of once each production day and displayed in the laboratory. Note any process changes or adjustments on the Air Voids chart.

- (i) Sampling Frequency. Conduct those tests as required above at the following frequency for each mixture produced based on the estimated plant tonnage at the beginning of the day.

<u>Total Estimated Production, tons</u>	<u>Number of Tests</u>
50-800	1
801-1700	2
1701-2700	3
2701+	4

NOTE: Material placed in a storage silo from a previous day's production shall be randomly sampled and tested when removed for placement on the roadway. Such sample(s) shall be independent of the day's production sampling frequency and shall be used in calculating the four (4) sample running average.

- (j) Sample Requirements. Obtain the asphalt mixture samples from trucks at the plant. Obtain aggregate samples from cold feed bins or aggregate stockpile. Save a split portion of all mixture samples at the laboratory site in a dry and protected location for 14 calendar days. At the completion of the project, the remaining samples may be disposed of with the approval of the Engineer.

The above testing frequencies are for the estimated plant production for the day. If production is discontinued or interrupted, the tests will be conducted at the previously established sample tonnage points for the materials that are actually produced. If the production exceeds the estimated tonnage, sampling and testing will continue at the testing increments previously established for the day. A testing increment is defined as the estimated daily tonnage divided by the required number of tests from the table in 907-401.02.5.3 paragraph (i).

In addition to the above program, the following tests shall be conducted on the first day of production and once for every eight production samples thereafter, with a minimum of one test per production week.

Aggregate Stockpile Gradations (AASHTO T-11 and T-27)

Reclaimed Asphalt Pavement (RAP) Gradation (Mississippi Test Method MT-31)

Fine Aggregate Angularity for all 4.75 mm and 9.5 mm mixtures and all MT and HT mixtures designed above the maximum density line. (ASTM C 1252, Method A)

Testing of the aggregate and RAP stockpiles during production will be waived provided the Contractor provides the Engineer with gradation test results for the materials in the stockpile

determined during the building of the stockpiles. The test results provided shall represent a minimum frequency of one per one thousand tons of material in the stockpile. If the Contractor continues to add materials to the stockpile during HMA production, the requirements for gradation testing during production are not waived.

907-401.02.5.4--Documentation. The Contractor shall document all observations, records of inspection, adjustments to the mixture, and test results on a daily basis. All tests conducted by the Contractor in accordance with 907-401.02.5.3(h) shall be included in the running average calculations. If single tests are performed as a check on individual HMA properties, between regular samples, without performing all tests required in 907-401.02.5.3(h), the results of those individual tests shall not be included in the running average calculations for that particular property. The Contractor shall record the results of observations and records of inspection as they occur in a permanent field record. The Contractor shall record all process adjustments and job mix formula (JMF) changes on the air void charts. The Contractor shall provide copies of all test data sheets and the daily summary reports on the appropriate Mississippi DOT forms to the Engineer on a daily basis. The Contractor shall provide a written description of any process change (including blend proportions) to the Engineer as they occur. Information provided to the Engineer must be received in the Engineer's office by no later than 9:00 AM the day after the HMA is produced. Fourteen days after the completion of the placement of the HMA, the Contractor shall provide the Engineer with the original testing records and control charts in a neat and orderly manner.

907-401.02.5.5--Control Limits. The following control limits for the job mix formula (JMF) and warning limits are based on a running average of the last four data points.

<u>Item</u>	<u>JMF Limits</u>	<u>Warning Limits</u>
Sieve - % Passing		
1/2-in	± 5.5	± 4.0
3/8-in	± 5.5	± 4.0
No. 8	± 5.0	± 4.0
No. 16 (For 4.75 mm mixtures ONLY)	± 4.0	± 3.0
No. 30	± 4.0	± 3.0
No. 200	± 1.5	± 1.0
Asphalt Content, %	-0.3 to +0.5	-0.2 to + 0.4
Total Voids @ N _{Design} , %	± 1.3	± 1.0
VMA @ N _{Design} , %	- 1.5	- 1.0

907-401.02.5.6--Warning Bands. Warning bands are defined as the area between the JMF limits and the warning limits.

907-401.02.5.7--Job Mix Formula Adjustments. A request for a JMF adjustment signed by a CAT-II may be made to the Engineer by the Contractor. Submit sufficient testing data with the request to justify the change. The requested change will be reviewed by the State Materials Engineer for the Department. If current production values meet the mixture design requirements, a revised JMF will be issued. Adjustments to the JMF shall conform to the latest edition of MDOT's Field Manual for HMA. Adjustments to the JMF to conform to actual production shall not exceed the tolerances specified for the JMF limits. Regardless of such tolerances, any adjusted JMF gradation shall be within the design master range for the mixture specified. **The JMF asphalt content may only be reduced if the production VMA meets or exceeds the minimum design VMA requirements for the mixture being produced.**

907-401.02.5.8--Actions and Adjustments. Based on the process control test results for any property in question, the following actions shall be taken or adjustments made when appropriate:

- (a) When the running average trends toward the warning limits, the Contractor shall consider taking corrective action. The corrective action, if any, shall be documented. All tests shall be part of the contract files and shall be included in the running average calculations.
- (b) The Contractor shall notify the Engineer whenever the running average exceeds the warning limits.
- (c) If two consecutive running averages exceed the warning limit, the Contractor shall stop production and make adjustments. Production shall only be restarted after notifying the Engineer of the adjustments made.
- (d) If the adjustment made under (c) improves the process such that the running average after four additional tests is within the warning limits, the Contractor may continue production with no reduction in payment.
- (e) If the adjustment made under (c) does not improve the process and the running average after four additional tests stays in the warning band, the mixture will be considered unsatisfactory. Reduced payment for unsatisfactory mixtures will be applied starting from the stop point to the point when the running average is back within the warning limits in accordance with Subsection 907-401.02.6.3.
- (f) Failure to stop production and make adjustments when required shall subject all mixture produced from the stop point to the point when the running average is back within the warning limits to be considered unsatisfactory. Reduced payment for unsatisfactory mixtures will be applied in accordance with Subsection 907-401.02.6.3.
- (g) If the running average exceeds the JMF limits, the Contractor shall stop production and make adjustments. Production shall only be restarted after notifying the Engineer of the adjustments made.
- (h) All materials for which the running average exceeds the JMF limits will be considered unacceptable and shall be removed and replaced by the Contractor at no additional cost to the State. The Engineer will determine the quantity of material to be replaced based on a review of the individual testing data which make up the running average in question and an inspection of the completed pavement. If the Engineer decides to leave the mixture in place because of special circumstances, the quantity of mixture, as defined above, will be paid for in accordance with Subsection 907-401.02.6.3.
- (i) Single test results shall be compared to 1.7 times the warning and JMF limits. If the test results verified by QA testing (within allowable differences in Subsection 907-401.02.6.2) exceed these limits, the pay factor provided in Subsection 907-401.02.6.3 will apply for the quantity of material represented by the test(s). Single test limits will be used for the acceptance of projects when insufficient tonnage is produced to require four (4) Contractor's tests.
- (j) The above corrective action will also apply for a mixture when the Contractor's testing data has been proven incorrect. The Contractor's data will be considered incorrect when; 1) the Contractor's tests and the Engineer's tests do not agree within the allowable differences given in Subsection 907-401.02.6.2 and the difference can not be resolved, or 2) the Engineer's tests indicates that production is outside the JMF limits and the results have been verified by the Materials Division. The Engineer's data will be used in place of the Contractor's data to determine the appropriate pay factor.

907-401.02.6--Standards of Acceptance.

907-401.02.6.1--General. Acceptance for mixture quality (VMA and total voids @ N_{Design} , gradation, and asphalt content) will be based on random samples tested in accordance with the

latest edition of MDOT's Field Manual for HMA. Pavement densities and smoothness will be accepted by lots as set out in 907-401.02.6.4 and 907-401.02.6.5.

907-401.02.6.2--Assurance Program for Mixture Quality. The rounding of test results will be in accordance with Subsection 700.04.

The Engineer will conduct assurance tests on split samples taken by the Contractor. These samples may be the regular quality management samples or a sample chosen by the Engineer anytime during production. The frequency will be equal to or greater than ten percent of the tests required for the Contractor quality control and the data will be provided to the Contractor within two asphalt mixture production days after the sample has been obtained by the Engineer. At least one sample shall be tested from the first two days of production. The Engineer may select any or all of the Contractor retained samples for assurance testing. All testing and data analysis shall be performed by a Certified Asphalt Technician-I (CAT-I) or by an assistant under the direct supervision of the CAT-I. Certification shall be in accordance with MDOT SOP TMD-22-10-00-000, MDOT HMA Technician Certification Program. The Department shall post a chart giving the names and telephone numbers for the personnel responsible for the assurance program.

The Engineer shall be allowed to inspect measuring and testing devices to confirm both calibration and condition. The Contractor shall calibrate and correlate all testing equipment in accordance with the latest version of the Department's Test Methods.

Random differences between the Contractor's and Engineer's split sample test results will be considered acceptable if within the following limits:

Item	Allowable Differences
Sieve - % Passing	
3/8-in and above	6.0
No. 4	5.0
No. 8	4.0
No. 16 (For 4.75 mm mixtures ONLY)	3.5
No. 30	3.5
No. 200	2.0
AC Content	0.4
Specimen Bulk SG (Gmb) @ N_{Design}	0.030
Maximum SG (Gmm)	0.020

In the event that; 1) the comparison of the Contractor's and Engineer's test results are outside the allowable differences in the above table, or 2) if a bias exists between the results (such that one of the results is predominately higher or lower than the other) and the Engineer's results fail to meet the JMF control limits, the Engineer will investigate the reason immediately. The Engineer's investigation may include testing of the remaining split samples, review and observation of the Contractor's testing procedures and equipment, and a comparison of split sample test results by the Contractor quality control laboratory, Department quality assurance laboratory and the Materials Division. The procedures outlined in the latest edition of MDOT's Field Manual for HMA may be used as a guide for the investigation. In the event that the Contractor's results are determined to be incorrect, the Engineer's results will be used for the quality control data and the appropriate payment for the mixture will be based on the procedures specified in Subsection 907-401.02.5.8 (see Subsection 907-401.02.5.8(j)).

The Engineer will periodically witness the sampling and testing being performed by the Contractor. The Engineer, both verbally and in writing, will promptly notify the Contractor of any observed deficiencies. When differences exist between the Contractor and the Engineer which cannot be resolved, a decision will be made by the State Materials Engineer, acting as the referee, and will in writing promptly notify the Contractor. If the deficiencies are not corrected, the Engineer will stop production until corrective action is taken.

907-401.02.6.3--Acceptance Procedure for Mixture Quality. All obviously defective material or mixture will be subject to rejection by the Engineer. Such defective material or mixture shall not be incorporated into the finished work. If the defective material has already been placed in the work, the material shall be removed and replaced at no additional cost to the State.

The Engineer will base final acceptance of the asphalt mixture production on the results of the Contractor's testing for total voids and VMA @ N_{Design} , gradation, and asphalt content as verified by the Engineer in the manner hereinbefore described and the uniformity and condition of the completed pavement. Areas of pavement that exhibit nonuniformity or failures (materials or construction related) such as but not limited to segregation, bleeding, shoving, rutting over ? ", raveling, slippage, or cracking will not be accepted. Such areas will be removed and replaced at no additional cost to the State.

Bituminous mixture placed prior to correction for deficiencies in VMA and total voids @ N_{Design} , gradation, or asphalt content, as required in 907-401.02.5.8 and determined by the Engineer satisfactory to remain in place will be paid for in accordance with the following pay factors times the contract unit price per ton.

Pay Factor for Mixture Quality *

Item	Produced in Warning Bands	Produced Outside JMF Limits (Allowed to Remain in Place)
Gradation	0.90	0.75
Asphalt Content	0.85	0.75
Total Voids @ N_{Design}	0.70	0.50
VMA @ N_{Design}	0.90	0.75

* The minimum single payment will apply.

907-401.02.6.4--Acceptance Procedure for Density. Each completed lift will be accepted with respect to compaction on a lot to lot basis from density tests performed by the Department. For normal production days, divide the production into approximately equal lots as shown in the following table. When cores are being used for the compaction evaluation, randomly obtain one core from each lot. When the nuclear density gauge is being used for compaction evaluation, obtain two random readings from each lot and average the results (see Chapter 7 of the latest edition of MDOT's Field Manual for HMA). Additional tests may be required by the Engineer to determine acceptance of work appearing deficient. The Contractor shall furnish and maintain traffic control for all compaction evaluations (including coring) required in satisfying specified density requirements.

Lot Determination

<u>Daily Production - Tons</u>	<u>Number of Lots</u>
0-300	1
301-600	2
601-1000	3
1001-1500	4
1501-2100	5
2101-2800	6
2801+	7

907-401.02.6.4.1--Roadway Density. The density requirement for each completed lift on a lot to lot basis from density tests performed by the Department shall be as follows:

1. For all single lift overlays, with or without leveling and/or milling, the required lot density shall be 92.0 percent of maximum density.
2. For all multiple lift overlays (two (2) or more lifts, excluding leveling lifts), the required lot density of the bottom lift shall be 92. 0 percent of maximum density. The required lot density for all subsequent lifts shall be 93.0 percent of maximum density.
3. For all pavements on new construction, the required lot density for all lifts shall be 93.0 percent of maximum density.

When it is determined that the density for a lot is below the required density (93.0 percent or 92.0 percent) but not lower than 91.0 or 90.0 percent of maximum density, respectively, the Contractor will have the right to remove and replace the lot(s) not meeting the specified density requirements in lieu of accepting reduced payment for the lot(s).

When it is determined that the density for a lot is above 96.0 percent, the Engineer shall notify the Contractor who will make plant adjustments to resolve the problem.

When it is determined that the density for a lot is below 91.0 or 90.0 percent, respectively, the lot(s), or portions thereof shall be removed and replaced in accordance with Chapter 7 of the latest edition of MDOT's Field Manual for HMA at no additional cost to the State. A corrected lot will be retested for approval. No resampling will be performed when pavement samples are used for determining density.

At any time the average daily compaction (the total of the percent compaction for the lots produced in one day divided by the total number of lots for the day) does not meet the required percent compaction or more for two consecutive days, the Contractor shall notify the Engineer of proposed changes to the compactive effort. If the average daily compaction does not meet the required percent compaction or more for a third consecutive day, the Contractor shall stop production until compaction procedures are established to meet the specified density requirements.

Each lot of work found not to meet the density requirement of 92.0 percent of maximum density may remain in place with a reduction in payment as set out in the following tables:

**PAYMENT SCHEDULE FOR COMPACTION
OF 92.0 PERCENT OF MAXIMUM DENSITY**

<u>Pay Factor</u>	<u>Lot Density ** % of Maximum Density</u>
1.00	92.0 and above
0.90	91.0 - 91.9
0.70	90.0 - 90.9

** Any lot or portion thereof with a density of less than 90.0 percent of maximum density shall be removed and replaced at no additional cost to the State.

**PAYMENT SCHEDULE FOR COMPACTION
OF 93.0 PERCENT OF MAXIMUM DENSITY**

<u>Pay Factor</u>	<u>Lot Density *** % of Maximum Density</u>
1.00	93.0 and above
0.90	92.0 - 92.9
0.70	91.0 - 91.9

*** Any lot or portion thereof with a density of less than 91.0 percent of maximum density shall be removed and replaced at no additional cost to the State.

The compaction pay factors and mixture quality pay factor (Subsection 907-401.02.6.3) will each apply separately. However, the combined pay factor shall not be less than 0.50 for any mixture allowed to remain in place.

907-401.02.6.4.2--Trench Widening Density. The density for trench widening on a lot to lot basis shall be determined from density tests performed by the Department using pavement samples (cores).

When it is determined that the density for a trench widening lot is below 89.0 percent but not lower than 88.0 percent of maximum density, the Contractor will have the right to remove and replace the lot(s) not meeting the specified density requirements in lieu of accepting reduced payment for the lot(s).

When it is determined that the density for a trench widening lot is above 95.0 percent, the Engineer shall notify the Contractor who will make plant adjustments to resolve the problem.

When it is determined that the density for a trench widening lot is below 88.0 percent, the lot(s), or portions thereof shall be removed and replaced in accordance with Chapter 7 of the latest edition of MDOT's Field Manual for HMA at no additional cost to the State. A corrected lot will be retested for approval. No resampling will be performed when pavement samples are used for determining density.

At any time the daily compaction (the total of the percent compaction for the lots produced in one day divided by the total number of lots for the day) does not meet 89.0 percent compaction or more for two consecutive days, the Contractor shall notify the Engineer of proposed changes to the compactive effort. If the average daily compaction does not meet 89.0 percent compaction or more for a third consecutive day, the Contractor shall stop production until compaction procedures are established to meet the specified density requirement.

Each lot of trench widening work found not to meet the density requirement of 91.0 percent of maximum density may remain in place with a reduction in payment as set out in the following table:

**PAYMENT SCHEDULE FOR COMPACTION
(TRENCH WIDENING WORK)**

<u>Pay Factor</u>	<u>Lot Density *** % of Maximum Density</u>
1.00	89.0 and above
0.50	88.0 - 88.9

*** Any lot or portion thereof with a density of less than 88.0 percent of maximum density shall be removed and replaced at no additional cost to the State.

The compaction pay factors and mixture quality pay factor (Subsection 907-401.02.6.3) will each apply separately. However, the combined pay factor shall not be less than 0.50 for any mixture allowed to remain in place.

907-401.02.6.5--Acceptance Procedure for Pavement Smoothness. When compaction is completed, the lift shall have a uniform surface and be in reasonably close conformity with the line, grade and cross section shown on the plans.

The smoothness of each applicable lift will be determined by using a profilograph to produce a profilogram (profile trace) at each designated location. The surface shall be tested and corrected to a smoothness index as described herein with the exception of those locations or specific projects that are excluded from a smoothness test with the profilograph.

The profilograph, furnished and operated by the Contractor under supervision of the Engineer, shall consist of a frame at least 25 feet in length supported upon multiple wheels having no common axle. The wheels shall be arranged in a staggered pattern so that no two wheels will simultaneously cross the same bump. A profile is to be recorded from the vertical movement of a sensing mechanism. This profile is in reference to the mean elevation of the contact points established by the support wheels. The sensing mechanism, located at the mid-frame, may consist of a single bicycle-type wheel or a dual-wheel assembly consisting of either a bicycle-type (pneumatic tire) or solid rubber tire vertical sensing wheel and a separate bicycle-type (pneumatic tire) longitudinal sensing wheel. The wheel(s) shall be of such circumference(s) to produce a profilogram recorded on a scale of one (1) inch equal to 25 feet longitudinally and one (1) inch equal to one (1) inch (full scale) vertically. Motive power may be provided manually or by the use of a propulsion unit attached to the center assembly. In operation, the profilograph shall be moved longitudinally along the pavement at a speed no greater than 3 MPH so as to reduce bounce as much as possible. The testing equipment and procedure shall comply with the requirements of Department SOP.

The Contractor may elect to use a computerized version of the profilograph in lieu of the standard profilograph. If the computerized version of the profilograph is used, it shall meet the requirements of Subsection 907-401.02.6.6.

The smoothness of each applicable lift will be determined for traffic lanes, auxiliary lanes, climbing lane and two-way turn lanes. Areas excluded from a smoothness test with the profilograph are acceleration and deceleration lanes, tapered sections, transition sections (for width), shoulders, crossovers, ramps, side street returns, etc. The roadway pavement on bridge replacement projects having 1,000 feet or less of pavement on each side of the structure will be excluded from a test with the profilograph. Pavement on horizontal curves having a radius of less than 1,000 feet at the centerline and pavement within the superelevation

transition of such curves are excluded from a test with the profilograph. The profilogram shall terminate 15 feet from each transverse joint that separates the pavement from a bridge deck, bridge approach slab or existing pavement not constructed under the contract.

A profilogram will be made for each applicable lift. The measurements will be made in the outside wheel path of exterior lanes and either wheel path of interior lanes. The wheel path is designated as being located three feet from the edge of pavement or longitudinal joint. The testing will be limited to a single profilogram for each lift of a lane except that a new profilogram will be made on segments that have been surface corrected. When surface corrections are required and/or made, a new profilogram will be made. The new profilogram shall meet the requirements of Subsection 907-403.03.2.

Each applicable lift will be accepted on a segment to segment basis for pavement smoothness. Where the profile index requirement of the lift is 30.0 inches per mile, no segment of the lift with a profile index greater than 30.0 inches per mile shall be allowed to remain in place without correction. For the purpose of determining pavement smoothness and contract price adjustment for rideability (Subsection 907-403.03.2), each day's production will be sub-divided into sections which terminate at bridges, transverse joints or other interruptions. Each section will be sub-divided into segments of 528 feet. Where a segment less than 528 feet occurs at the end of a section, it will be combined with the preceding 528-foot segment for calculation of the profile index. The last 15 feet of a day's lift may not be obtainable until the lift is continued and for this reason may be included in the subsequent segment.

A profile index will be determined for each segment as inches per mile in excess of the "Zero" blanking band which is simply referred to as the "Profile Index". From the profilogram of each segment, the scallops above and below the "Zero" blanking band are totaled in tenths of an inch. The totaled count of tenths is converted to inches per mile to establish a smoothness profile index for that segment.

Individual bumps and/or dips that are identified on the profilogram by locating vertical deviations that exceed four tenths of an inch when measured from a chord length of 25 feet or less shall be corrected regardless of the profile index value of the segment. Surface correction by grinding shall be in accordance with Subsection 907-401.02.6.7. The Contractor shall also make other necessary surface corrections to ensure that the final profile index of the segment meets the requirements of Subsection 907-403.03.2.

Segment(s) exceeding the accepted profile index value shall be corrected as specified in Subsection 907-403.03.4. All such corrections shall be at the expense of the Contractor.

Scheduling will be the responsibility of the Contractor with approval of the Engineer, and the tests shall be conducted within 72 hours after each day's production unless authorized otherwise by the Engineer. The Contractor will be responsible for traffic control associated with this testing operation.

907-401.02.6.6--Computerized Profilograph.

907-401.02.6.6.1--General The computerized profilograph, furnished and operated by the Contractor under the supervision of the Engineer, shall be equipped with an on-board computer capable of meeting the following conditions.

Vertical displacement shall be sampled every three (3) inches or less along the roadway. The profile data shall be bandpass filtered in the computer to remove all spatial wavelengths shorter than two (2) feet. This shall be accomplished by a third order, low pass Butterworth filter. The resulting band limited profile will then be computer analyzed according to the

California Profilograph reduction process to produce the required inches per mile index. This shall be accomplished by fitting a linear regression line to each 528 feet of continuous pavement section. This corresponds to the perfect placement of the blanking band bar by a human trace reducer. Scallop above and below the blanking band are then detected and totaled according to the California protocol. Bump/Dip analysis shall take place according to the California Profilograph reduction process.

The computerized profilograph shall be capable of producing a plot of the profile and a printout which will give the following data: Stations every twenty five (25) feet, bump/dip height and bump/dip length of specification (4/10 of an inch and 25 feet respectively), the blanking band width, date of measurement, total profile index in inches per mile for the measurement, total length of the measurement, and the raw inches for each tenth mile segment.

907-401.02.6.6.2--Mechanical Requirements. The profilograph shall consist of a frame twenty five (25) feet long supported at each end by multiple wheels. The frame shall be constructed to be easily dismantled for transporting. The profilograph shall be constructed from aluminum, stainless steel and chromed parts. The end support wheels shall be arranged in a staggered pattern such that no two wheels cross a transverse joint at the same time. The relative smoothness shall be measured by the vertical movement of an eight (8) inch or larger diameter sensing wheel at the midpoint of the 25-foot frame. The horizontal distance shall be measured by a twenty (20) inch or larger diameter pneumatic wheel. This profile shall be the mean elevation referenced to the twelve points of contact with the pavement established by the support wheels. Recorded graphical trace of the profile shall be on a scale of one inch equals one inch (full scale) vertical motion of the sensing wheel and one inch equals 25 feet horizontal motion of the profilograph.

907-401.02.6.6.3--Computer Requirements. The computer shall have the ability to produce output on sight for verification. The computerized output shall indicate the profile index for each specified section of roadway. Variable low and high pass third-order Butterworth filtering options shall be available. The printout shall be capable of showing station marks automatically on the output. Blanking band positioning for each specified section of the roadway shall be placed according to the least squares fit line of the collected data. Variable bump and dip tests shall be available to show "must correct" locations on the printout. The computer must have the ability to display on screen "must correct" conditions and alert the user with an audible warning when a "must correct" location has been located. The computer must have the ability to store profile data for later reanalysis. The measurement program must be menu driven and IBM compatible. User selected options, identification, calibration factors, and time and date stamps shall be printed at the top of each printed report for verification. The control software must be upgradeable. A power source shall be included for each profilograph and be capable of supplying all power needs for a full days testing.

907-401.02.6.7--Surface Correction. Corrective work to bumps shall consist of diamond grinding in accordance with these specifications or methods approved by the Engineer. All surface areas corrected by grinding shall be sealed with a sealant approved by the Engineer.

907-401.02.6.7.1--Diamond Grinding. Grinding of asphalt surfaces shall consist of diamond grinding the existing asphalt pavement surface to remove surface distortions to achieve the specified surface smoothness requirements.

907-401.02.6.7.2--Equipment. The grinding equipment shall be a power driven, self-propelled machine that is specifically designed to smooth and texture pavement surfaces with diamond blades. The effective wheel base of the machine shall not be less than 12.0 feet. It shall have a set of pivoting tandem bogey wheels at the front of the machine and the rear

wheels shall be arranged to travel in the track of the fresh cut pavement. The center of the grinding head shall be no further than 3.0 feet forward from the center of the back wheels.

The equipment shall be of a size that will cut or plane at least 2.0 feet wide. It shall also be of a shape and dimension that does not encroach on traffic movement outside of the work area. The equipment shall be capable of grinding the surface without causing spalls at joints, or other locations.

907-401.02.6.7.3--Construction. The construction operation shall be scheduled and proceed in a manner that produces a uniform finish surface. Grinding will be accomplished in a manner to provide positive lateral drainage by maintaining a constant cross-slope between grinding extremities in each lane.

The operation shall result in pavement that conforms to the typical cross-section and the requirements specified in 907-401.02.6.7.4. It is the intent of this specification that the surface smoothness characteristics be within the limits specified.

The Contractor shall establish positive means for removal of grinding residue. Solid residue shall be removed from pavement surfaces before it is blown by traffic action or wind. Residue shall not be permitted to flow across lanes used by public traffic or into gutters or drainage facilities, but may be allowed to flow into adjacent ditches.

907-401.02.6.7.4--Finished Pavement Surface. The grinding process shall produce a pavement surface that is smooth and uniform in appearance with a longitudinal line type texture. The line type texture shall contain parallel longitudinal corrugations that present a narrow ridge corduroy type appearance. The peaks of the ridges shall not be more than 1/16 inch higher than the bottoms of the grooves.

The finished pavement surface will be measured for riding quality. The grinding shall produce a riding surface which does not exceed either the specified profile index or the specified bump and dip limit.

907-401.02.7--Nuclear Gauges.

907-401.02.7.1--Nuclear Moisture-Density Gauge. The nuclear gauge unit used to monitor density shall contain a full data processor which holds all calibration constants necessary to compute and directly display wet density, moisture, and dry density in pounds per cubic foot. The data processor shall compute and display the percent moisture and percent density based on dry weight.

907-401.02.7.2--Nuclear Asphalt Content Gauge. The Contractor shall furnish and calibrate, unless designated otherwise in the contract, a Troxler Nuclear Asphalt Content Gauge (Model 3241 or updated model) or a Campbell Nuclear Asphalt Content Gauge (Model AC-2) or an approved equal.

907-401.03--Construction Requirements. Mississippi DOT has adopted the "Hot-Mix Asphalt Paving Handbook" as the guideline for acceptable HMA construction practices.

907-401.03.1--Specific Requirements.

907-401.03.1.1--Weather Limitations. The mixture shall not be placed when weather conditions prevent the proper handling and finishing or the surface on which it is to be placed is wet or frozen. At the time of placement, the air and pavement surface temperature limitations shall be equal to or exceed that specified in the following table:

TEMPERATURE LIMITATIONS

Compacted Thickness	Temperature
Less than 1½ inches	55°F
1½ inches to 2 inches	50°F
2¼ inches to 3 inches	45°F
Greater than 3 inches	40°F

When paving operations are discontinued because of rain, the mixture in transit shall be protected until the rain ceases. The surface on which the mixture is to be placed shall be swept to remove as much moisture as possible and the mixture may then be placed subject to removal and replacement at no additional cost to the State if contract requirements are not met.

907-401.03.1.2--Tack Coat. Tack coat shall be applied to previously placed HMA and between lifts, unless otherwise directed by the Engineer. The tack coat shall be applied as a spray coating, fog coating, or "spider webbing". Construction requirements shall be in accordance with Subsection 407.03.

907-401.03.1.3--Blank.

907-401.03.1.4--Density. The lot density for all dense graded pavement lifts, except as provided below for preleveling, wedging [less than fifty percent (50%) of width greater than minimum lift thickness], ramp pads, irregular shoulder areas, median crossovers, turnouts, or other areas where the established rolling pattern cannot be performed, shall not be less than 92.0 percent of the maximum density based on AASHTO Designation: T 209 for the day's production. If a job-mix formula adjustment is made during the day which affects the maximum specific gravity, calculate a new average maximum density for the lot(s) placed after the change.

Pavement core samples obtained for determining density which have a thickness less than two times the maximum size aggregate permitted by the job-mix formula will not be used as a representative sample.

Preleveling, wedging [less than fifty percent (50%) of width greater than minimum lift thickness], ramp pads, irregular shoulder areas, median crossovers, turnouts, and other areas where an established rolling pattern cannot be obtained shall be compacted to refusal densification.

907-401.03.2--Bituminous Mixing Plants.

907-401.03.2.1--Plant Requirements.

907-401.03.2.1.1--Cold Aggregate Storage. The cold storage for hydrated lime shall be a separate bulk storage bin with a vane feeder or other approved feeder system which can readily be calibrated. The system shall provide a means for easy sampling of the hydrated lime additive and verifying the quantity of lime dispensed. The feeder system shall require a totalizer.

The hydrated lime additive equipment shall be interlocked and synchronized with the cold feed controls to operate concurrently with the cold feed operation which will automatically adjust the hydrated lime feed to variations in the cold aggregate feed. A positive signal

system shall be installed which will automatically shut the plant down when malfunctions cause an improper supply of hydrated lime or water.

The plant shall not operate unless the entire hydrated lime system is functioning properly.

907-401.03.2.1.2--Cold Aggregate Feed. The hydrated lime shall be dispensed dry or as a slurry (1 part hydrated lime to 3 parts water) directly onto the composite aggregate between the cold feed and the dryer.

When hydrated lime is introduced dry, a spray bar or other approved system capable of spraying all aggregate with water shall be installed in order to maintain all aggregate at the moisture condition set out in Subsection 907-401.02.3.1 prior to addition of the hydrated lime. An alternate system for spraying the coarse aggregate stockpiles may be allowed when approved by the Engineer. The approved equipment and methods shall consistently maintain the aggregate in a uniform, surface wet condition. The moisture content of the aggregate-hydrated lime mixture, following spraying and mixing, shall be introduced into the automatic moisture controls of the plant.

The aggregate-hydrated lime mixture shall be uniformly blended by some mechanical means such as a motorized "on the belt" mixer or pug mill located between the cold feed and the dryer. Other mixing devices may be used subject to approval by the Engineer.

A maximum of forty five (45) percent of the total aggregate blend may be fed through any single cold feed bin. If the JMF calls for more than forty five (45) percent of a specific aggregate, that aggregate must be fed through two (2) or more separate cold feed bins.

907-401.03.2.1.3--Dryer. The efficiency of drying aggregates shall be such that the moisture content of the top HMA mixture shall not exceed 0.50 percent by weight of the total mixture, and the moisture content of all the underlying mixtures shall not exceed 0.75 percent by weight of the total mixture being produced.

907-401.03.2.1.4--Blank.

907-401.03.2.1.5--Control of Bituminous Material and Antistripping Agent. Specified bituminous materials from different manufacturers or from different refineries of a single manufacturer shall not be mixed in the plant's asphalt cement supply system storage tank and used in the work without prior written approval of the Engineer. Approval is contingent upon the Engineer's receipt of three copies of the manufacturer's certified test report(s) from the Contractor showing that the bituminous material blend conforms to the specifications.

A satisfactory method of weighing or metering shall be provided to ensure the specified quantity of bituminous material. Provisions shall be provided for checking the quantity or rate of flow. Weighing or metering devices shall be accurate within plus or minus one-half percent.

The antistripping agent shall be injected into the bituminous material immediately prior to the mixing operation with an approved in-line injector system capable of being calibrated so as to ensure the prescribed dosage.

An in-line spigot for sampling of asphalt shall be located between the asphalt storage tank and the antistripping agent in-line injector.

907-401.03.2.1.6--Thermometric Equipment. An armored thermometer of adequate range and calibrated in 5°F increments shall be fixed at a suitable location in the bituminous line near the charging valve of the mixer unit.

The plant shall be equipped with an approved dial-scale, mercury-actuated thermometer, pyrometer or other approved thermometric instrument placed at the discharge chute of the dryer to measure the temperature of the material.

When the temperature control is unsatisfactory, the Engineer may require an approved temperature-recording apparatus for better regulation of the temperature.

907-401.03.2.1.7--Screens. A scalping screen shall be used.

907-401.03.2.1.8--Dust Collector. The plant shall be equipped with a dust collector constructed to waste or return collected material. When collected material is returned, it shall be returned through a controlling device which will provide a uniform flow of material into the aggregate mixture.

907-401.03.2.1.9--Safety Requirements. A platform or other suitable device shall be provided so the Engineer will have access to the truck bodies for sampling and mixture temperature data.

907-401.03.2.1.10--Blank.

907-401.03.2.1.11--Truck Scales. The specifications, tolerances and regulations for commercial weighing and measuring devices as recommended by the National Bureau of Standards [National Institute of Standards and Technology (NIST) Handbook 44] shall govern truck scales used in the State of Mississippi, except weighing devices with a capacity of ten thousand (10,000) pounds or more used to weigh road construction materials (i.e. sand, gravel, asphalt, fill dirt, topsoil and concrete) shall have a tolerance of one-half of one percent (1/2 of 1%) in lieu of the requirements of Handbook 44 and shall be regulated by the Mississippi Department of Transportation.

Scales shall be checked and certified by a scale company certified in heavy truck weights by the Mississippi Department of Agriculture and Commerce. In the case of scales used for measurement of materials on Department of Transportation projects, certification shall be performed in the presence of an authorized representative of the Department or a copy of the certification may be furnished for scales that have been checked and certified within the last six months for use on other Department of Transportation projects and are still in the position where previously tested. Scales that have not been checked and certified under NIST Handbook 44 guidelines, except for the herein modified tolerances allowed, shall be so checked and certified prior to use for measurement of materials on Department of Transportation projects. Tests shall be continued on six month intervals with the test conducted in the presence of an authorized representative of the Department.

Truck scales shall be accurate to one-half of one percent of the applied load, shall be sensitive to 20 pounds, and shall have a graduation of not more than 20 pounds.

The Contractor may use an electronic weighing system approved by the Engineer in lieu of truck scales. The system shall be equipped with an automatic print out system which will print a ticket for each load with the following information:

MDOT, Contractor's name, project number, county, ticket number, load number, pay item number, item description of the material delivered, date, time of day, haul vehicle number, gross weight, tare weight, net weight and total daily net weight.

When approved by the Engineer and materials are measured directly from a storage bin equipped with load cells, exceptions may be made to the gross and tare weight requirements.

The ticket shall also have a place for recording the temperature of HMA mixtures, if applicable, and the signatures of MDOT's plant and roadway inspectors. The load numbers for each project shall begin with load number one (1) for the first load of the day and shall be numbered consecutively without a break until the last load of the day. The Contractor shall provide MDOT with an original and one copy of each ticket. When the ticket information provided by the Contractor proves to be unsatisfactory, MDOT will use imprinter(s) and imprinter tickets to record load information. All recorded weights shall be in pounds and shall be accurate to within one-half of one percent of the true weight, and the system shall be sensitive to 20 pounds. The Engineer will require random loads to be checked on certified platform scales at no cost to the Department.

When an electronic weighing system utilizes the plant scales of a batch plant, the system may be used only in conjunction with a fully automatic batching and control system.

907-401.03.2.2--Additional Requirements for Batching Plants.

907-401.03.2.2.1--Plant Scales. The plant batch scale weight shall not exceed the platform scale weight by more than one percent (1%).

907-401.03.2.3--Additional Requirements for Drum Mixing Plants.

907-401.03.2.3.1--Plant Controls. The plant shall be operated with all the automatic controls as designed and provided by the plant manufacturer. If the automatic controls malfunction, brief periods of manual operations to complete the day's work or to protect the work already placed may be conducted with the approval of the Engineer. During manual operation, the Contractor must continue to produce a uniform mixture meeting all contract requirements.

907-401.03.2.3.2--Aggregate Handling and Proportioning. A screening unit shall be placed between the bins and the mixer to remove oversized aggregate, roots, clayballs, etc.

907-401.03.2.4--Surge or Storage Bins. Surge and/or storage systems may be used at the option of the Contractor provided each system is approved by the Department prior to use. Surge bins shall be emptied at the end of each day's operation. Storage silos may be used to store mixtures as follows:

19-mm & 25-mm mixtures ----- 24 hours
9.5-mm & 12.5-mm mixtures ----- 36 hours

The storage silos must be well sealed, completely heated and very well insulated. The mixture when removed from the storage silo shall be tested to ensure that it meets all the same specifications and requirements as the mixture delivered directly to the paving site. See Subsection 907-401.02.5.3, subparagraph (i) for sampling and testing requirements.

907-401.03.3--Hauling Equipment. The inside surfaces of each vehicle bed shall be coated with a light application of water and thin oil, soap solution, lime water solution or other approved material to prevent the mixture from sticking. Diesel fuel or gasoline shall not be used to lubricate vehicle beds. Truck beds shall be raised to drain excessive lubricants before placing mixture in the bed. An excess of lubricant will not be permitted.

907-401.03.4--Bituminous Pavers. The screed or strikeoff assembly shall be capable of vibrating and heating the full width of the mixture being placed and shall lay the lift with an

automatic control device to the specified slope and grade without tearing, pulling or gouging the mixture surface.

907-401.03.5--Rollers. All rollers shall be self-propelled units capable of maintaining a smooth and uniform forward and reverse speed as required for proper compaction. They shall be equipped with adjustable scrapers, water tanks, mats and a device for wetting the wheels or tires to prevent the mixture from sticking. Adhesion of the mixture to the rollers will not be permitted. The use of diesel fuel or gasoline for cleaning roller wheels or tires or to aid in preventing the mixture from sticking to the wheels or tires is prohibited.

All rollers shall be in good mechanical condition, free from leaking fuels and lubricants, loose link motion, faulty steering mechanism, worn king bolts and bearings. They shall be operational at slow speeds to avoid displacement of the mixture and capable of reversing direction smoothly and without backlash.

907-401.03.6--Preparation of Grade. The foundation upon which HMA pavement is to be placed shall be prepared in accordance with the applicable Section of the Standard Specification.

Unless otherwise directed, tack coat shall be applied to the underlying surface on which the mixture is to be placed. Emulsions, if used, must be allowed to "break" prior to placement of the bituminous mixture.

Bituminous mixture shall not be placed against the edge of pavements, curbs, gutters, manholes and other structures until sprayed with a thin uniform tack coating. The tack coat shall be protected until the mixture has been placed.

Existing HMA pavements that require preliminary leveling or patching in advance of placing the bituminous mixture shall be sprayed with a tack coat material and then brought as nearly as practicable to uniform grade and cross section. The material shall be placed by hand or machine in one or more compacted layers approximately two (2) inches or less in compacted thickness.

907-401.03.7--Blank.

907-401.03.8--Preparation of Mixture. The temperature of the mixture, when discharged from the mixer, shall not exceed 340°F.

907-401.03.9--Material Transfer Equipment. Except for the areas mentioned below, when placing the top intermediate lift and/or the top lift of HMA pavements, the material transferred from the hauling unit shall be remixed prior to being placed in the paver hopper or insert by using an approved Materials Transfer Device. Information on approved devices can be obtained from the State Construction Engineer. Areas excluded from this requirement include: temporary work of short duration, detours, bridge replacement projects having less than 1,000 feet of pavement on each side of the structure, acceleration and deceleration lanes less than 1,000 feet in length, tapered sections, transition sections (for width), shoulders less than 10 feet in width, crossovers, ramps, side street returns and other areas designated by the Engineer.

907-401.03.10--Spreading and Finishing. Grade control for HMA pavements shall be established by stringline at least 500 feet ahead of spreading, unless placement is adjacent to curb and gutter, concrete pavement, or other allowed grade control.

The mixture shall be spread to the depth and width that will provide the specified compacted thickness, line, grade and cross section. Placing of the mixture shall be as continuous as

possible. On areas where mechanical spreading and finishing is impracticable, the mixture may be spread, raked and luted by hand tools.

Immediately after screeding and prior to compaction, the surface shall be checked by the Contractor and irregularities adjusted. When the edge is feathered as in a wedge lift, it may be sealed by rolling. Irregularities in alignment and grade along the edges shall be corrected before the edges are rolled.

Hauling, spreading and finishing equipment shall be furnished that is capable of and operated in such a manner that the rolling operation will satisfactorily correct any surface blemishes.

The longitudinal joint in the subsequent lift shall offset that in the underlying lift by approximately six (6) inches. However, the joint in the top lift shall be at the centerline or lane line.

907-401.03.11--Compaction. After the mixture has been spread and surface irregularities corrected, it shall be thoroughly and uniformly compacted to the required line, grade, cross section and density.

907-401.03.12--Joints. Joints between previously placed pavement and pavement being placed shall be so formed as to insure thorough and continuous bond.

Transverse construction joints shall be formed by cutting the previously placed mixture to expose the full depth of the lift.

The contact surface of transverse joints and longitudinal joints, except hot joints, shall be sprayed with a thin uniform tack coating before additional mixture is placed against the previously placed material.

Longitudinal joints shall be formed by overlapping the screed on the previously placed material for a width of at least one (1) inch and depositing the quantity of mixture to form a smooth, tight joint.

907-401.03.13--Pavement Samples. The Contractor shall cut samples from each lift of HMA at the time and locations designated by the Engineer. The samples shall be taken for the full depth of each lift and shall be of a size approved by the Engineer but not to exceed 120 square inches. Tools used for cutting or coring of samples shall be of the revolving blade type such as saw or core drill. Cores shall be taken using a 4.0 to 6.0-inch inside diameter coring bit. The sample hole shall be filled, compacted and finished by the Contractor to conform with the surrounding area. No additional compensation will be allowed for furnishing samples and repairing the areas with new pavement.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-403-17

CODE: (SP)

DATE: 10/10/2002

SUBJECT: Maintained Hot Mix Asphalt (HMA)

PROJECT: IM-0055-03(076) / 103395 GRENADA & YALOBUSHA COUNTIES

Section 403, Hot Bituminous Pavement, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is deleted in toto and replaced as follows:

SECTION 907-403 –MAINTAINED HOT MIX ASPHALT PAVEMENT

907-403.01--General.

907-403.01.1--Description. This work will consist of the construction and maintenance of Hot Mix Asphalt (HMA) pavement in conformance with the lines and grades shown on the plans or as designated by the Department.

The Contractor will maintain the finished roadway and ramps for a period of seven years. The maintenance period will commence on the date of the final inspection and release as documented in writing by the State Construction Engineer. The Contractor shall have no obligation to monitor or review the finished roadway or ramp at any time during the seven (7)-year maintenance period, as set out herein. The Contractor's only obligation is to perform required remedial work after first having been given notice by the Department of the need for such work. In all other respects, project closeout will proceed in accordance with MDOT Standard Operating Procedures.

Sections 301, 401, 702 and 703 of the Standard Specifications are deleted for this item of work.

The provisions of this Special Provision will apply to all HMA placed on the finished roadway and ramps.

The maintenance work referenced in the special provision does not nor is intended to include routine maintenance work. The referenced maintenance work consists of remedial work deemed to be necessary as a result of evaluation criteria established on the basis of the Distress Identification Manual for Long-Term Pavement Performance (LTPP) Program published by Strategic Highway Research Program (SHRP).

907-403.01.2--Maintenance. Upon final inspection of the HMA pavement, a single term 7-year maintenance bond will be in effect for the entire period. The bonding company is required to have an A.M. Best rating of "A-" or better and the Contractor will provide proof of a 7-year bond commitment before execution of the contract.

The 7-year maintenance bond will be \$ 2,000,000 for the HMA pavement. The bond will insure the proper and prompt completion of required maintenance work following the completion of the pavement, including payments for all labor performed, equipment and materials used in accordance with this specification.

All remedial work will be in accordance with Subsection 907-403.01.5. At the end of the maintenance period, the Contractor will be released from further maintenance work or responsibility, provided all previous maintenance work has been completed.

907-403.01.3--Documentation. Prior to the start of construction, the Contractor shall provide the Department with a Project Management Plan which will include but not be limited to: the proposed Job Mix Formula (JMF), the method of developing the JMF, all JMF testing, a list of materials and their test properties, a quality control plan and construction plan that includes lift thickness and lane widths. The job mix formula shall be signed by a Certified Mixture Design Technician (CMDT).

The purpose of the Contractor's Project Management Plan is to provide sufficient information to adequately inform the Department of proposed project activities.

Appendix 'A' is provided for the Contractor's information and may be used in developing applicable sections of the Contractor's Project Management Plan.

Within ten (10) working days of receiving the Contractor's Project Management Plan, the Engineer will approve said plan as to meeting the requirements of this specification.

If deemed necessary, the Contractor may submit a revised Project Management Plan.

Prior to final inspection, the Contractor shall provide the Department with copies of records for any quality control testing of mixture properties and roadway density tests conducted during the construction of the project.

907-403.01.4--Conflict Resolution Team. The Conflict Resolution team shall consist of two Contractor representatives, two Department (one District & one Central Office) representatives, and a third party representative mutually agreed upon by both the Department and the Contractor. The cost of third party representative will be shared equally between the Department and the Contractor. The team members will be identified in writing prior to the start of paving. The Conflict Resolution Team may perform a distress survey of the pavement as defined by this special provision if necessary and will have the final authority to make decisions if conflict occurs. Prior to conducting such a survey, team members will receive the standard Department training given to pavement distress raters. Decisions rendered by the Conflict Resolution Team will require a simple majority, with a vote of all five members being required.

907-403.01.5--Remedial Work. During the maintenance period, the remedial work, if necessary, will be performed at no additional cost to the State and will be based on the results of the Department's pavement distress survey as referenced in Subsection 907-403.01.5.1. The materials to be used for remedial work will be the joint decision of the Contractor and the Department. Should an impasse develop, the Conflict Resolution Team will render a final decision.

During the maintenance period, the Contractor may, but has no obligation to, monitor the pavement in question using nondestructive procedures. All proposed remedial action(s) will be coordinated with the Department.

Coring, milling or other destructive procedures may not be performed by the Contractor, without prior consent of the Department. The Contractor will not be responsible for damages as a direct result of coring, milling or other destructive procedures conducted by the Department.

907-403.01.5.1--Pavement Distress Indicators, Thresholds and Remedial Action. The SHRP-P-338 Distress Identification Manual will be used as the basis for determining the method for measuring distresses.

MDOT will conduct pavement distress surveys on the mainline and/or ramps by dividing the project into nominal one (1) mile sections. Each section will be divided into ten approximately

500-foot long segments. Two 500-foot segments in each section will be evaluated for pavement distress at the approximate third points of the section.

As a minimum, MDOT will conduct the distress surveys annually. The Contractor will be advised prior to conducting the survey. The results will be made available to the Contractor, District, Central Office (Construction), and FHWA within 30 days. If the Contractor disputes the survey findings, written notification of the dispute will be made to the Department within 15 days from the date the Contractor received the results.

If any of the threshold levels are met or exceeded and the Contractor agrees to the validity of the pavement distress survey, the Contractor will remedy the distress. If the Contractor does not agree with the pavement distress survey results, the Conflict Resolution Team will resolve the dispute within 30 days from the date the Contractor received the results.

Remedial action will be taken in all segments of the project where the threshold is met or exceeded. If areas outside the survey segments are suspected of meeting or exceeding a threshold level, the Department will conduct the distress survey in other randomly located 500-foot sections to see if a threshold level has been met or exceeded. Unless disputed, remedial action will be taken within 45 days of the survey that indicated the threshold is met or exceeded provided that conditions and weather are acceptable as determined by the Department. Remedial action will be applied to the entire segment(s) in which the threshold is met or exceeded unless otherwise noted under remedial action. If anytime during the maintenance period, 30 percent or more of the total project segments require or have received any remedial action, then the entire project will receive a remedial action as determined by the Contractor and the Department. If an impasse develops, the Conflict Resolution Team will make a final determination.

The Contractor will perform the remedial work. If, in the opinion of the Department, the problem requires immediate attention for the safety of the traveling public, and the Contractor cannot commence the remedial work within eight hours after notification, the Department can have the remedial work performed by other forces and bill the Contractor accordingly. Remedial work performed by other forces will not alter the requirements, responsibilities, or obligations of the Contractor.

If remedial work or elective/preventive action work performed by the Contractor necessitates a corrective action within the project limits to the pavement or pavement markings, then such corrective action will be the responsibility of the Contractor. The Contractor will also be responsible for any and all damage to any highway feature resulting from such action.

The Contractor will not be held responsible for distresses which are caused by factors beyond the control of the Contractor. Repairs of distresses caused by such factors will be the responsibility of MDOT.

Specific Pavement Distress - The Contractor will be responsible for the following remedial action if the threshold levels for any of the distress types are met or exceeded:

DISTRESS TYPE	THRESHOLD LEVELS (Deduct Points)	REMEDIAL ACTION
Alligator Cracking	10.0	Remove and replace distressed layer(s). The removal area shall be equal to 150% (to include the full lane width) of the distressed surface area to a depth not to exceed the materials placed on this contract.
	15.0	Remove and replace distressed layer(s) of the segment to a depth not to exceed the materials placed on this contract.
Block Cracking	3.0	Remove and replace distressed layer(s). The removal area shall be equal to 110% (to include the full lane/ramp width) of the distressed surface area to a depth not to exceed the materials placed on this contract.
	5.0	Remove and replace distressed layer(s) of the segment to a depth not to exceed the materials placed on this contract.
Reflection Cracking	9.0	Seal cracks according to the current Department SOP.
Edge Cracking	3.0	Remove and replace distressed surface. The removal area shall be equal to 110% of the distressed surface area.
Longitudinal Cracking	4.0	Seal cracks according to the current Department SOP.
	6.0	Remove and replace surface layer full depth in the segment.
Transverse Cracking	3.0	Seal cracks according to the current Department SOP.
	5.0	Remove and replace distressed layer(s) to a depth not to exceed the materials placed on this contract for the segment.

DISTRESS TYPE	THRESHOLD LEVELS (Deduct Points)	REMEDIAL ACTION
Potholes	5.0	Remove and replace distressed surface. The removal area shall be equal to 150% of the distressed surface area.
	12.0	Remove and replace surface layer or patch potholes as outlined above and place a 1.25 inch overlay with a 9.5 mm mixture which meets current MDOT specifications for the segment.
Rutting *	5.0	Diamond Grind surface of the segment and fog seal with 0.1 gal/sy of asphalt emulsion diluted 50/50 with water.
	7.0	Remove and replace surface layer for the segment.
Raveling / Segregation	0.2	Remove and replace distressed surface. The removal area shall be equal to 150% (to include the full lane/ramp width) of the distressed surface area.
	0.6	Remove and replace surface layer for the full pavement width and place a 1.25 inch overlay with a 9.5-mm mixture which meets current MDOT specifications for the segment.
Surface Bleeding	0.4	Remove and replace distressed surface mixture full depth for the segment.
Friction Number**	Average Min. 35 No Value Below 25	Remove and replace surface mixture full depth for the segment.

* The Contractor will be relieved of the responsibility for remedial action if the estimated accumulated ESALs based on a current traffic count are 100% above the projected seventh year accumulated ESALs.

** The friction number of the pavement surface will be measured by MDOT using MDOT SOP RDD-02-01-00-000, "Pavement Friction Testing Procedures". Initially, friction numbers will be measured within 30 to 60 days after the date of final inspection. Re-measurements will be taken 30 to 60 days after the completion of any maintenance work which provides a new surface for any segment.

907-403.01.6--Elective Preventive Maintenance. Elective preventative maintenance shall be a Contractor option with the concurrence of the Department.

907-403.01.7--Traffic Control. This work shall be in accordance with Section 618 and Section 619 of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction and as follows. During maintenance work operations, all signing and traffic control will be in accordance with the Manual on Uniform Traffic Control and Devices.

907-403.01.8--Acceptance Procedure for Pavement Smoothness.

907-403.01.8.1--General. When compaction is completed, the lift shall have a uniform surface and be in reasonably close conformity with the line, grade and cross section shown on the plans.

The smoothness of the final surface lift will be determined by using a profilograph to produce a profilogram (profile trace) at each designated location. The surface shall be tested and corrected to a smoothness index as described herein with the exception of those locations or specific projects that are excluded from a smoothness test with the profilograph.

The profilograph, furnished and operated by the Contractor under supervision of the Engineer, shall consist of a frame at least 25 feet in length supported upon multiple wheels having no common axle. The wheels shall be arranged in a staggered pattern so that no two wheels will simultaneously cross the same bump. A profile is to be recorded from the vertical movement of a sensing mechanism. This profile is in reference to the mean elevation of the contact points established by the support wheels. The sensing mechanism, located at the mid-frame, may consist of a single bicycle-type wheel or a dual-wheel assembly consisting of either a bicycle-type (pneumatic tire) or solid rubber tire vertical sensing wheel and a separate bicycle-type (pneumatic tire) longitudinal sensing wheel. The wheel(s) shall be of such circumference(s) to produce a profilogram recorded on a scale of one (1) inch equal to 25 feet longitudinally and one (1) inch equal to one (1) inch (full scale) vertically. Motive power may be provided manually or by the use of a propulsion unit attached to the center assembly. In operation, the profilograph shall be moved longitudinally along the pavement at a speed no greater than 3 MPH so as to reduce bounce as much as possible. The testing equipment and procedure shall comply with the requirements of Department SOP.

The Contractor may elect to use a computerized version of the profilograph in lieu of the standard profilograph. If the computerized version of the profilograph is used, it shall meet the requirements of Subsection 907-403.01.8.2.

The smoothness of the final surface lift will be determined for traffic lanes, auxiliary lanes, climbing lane and two-way turn lanes. Areas excluded from a smoothness test with the profilograph are acceleration and deceleration lanes, tapered sections, transition sections (for width), shoulders, crossovers, ramps, side street returns, etc. Pavement on horizontal curves having a radius of less than 1,000 feet at the centerline and pavement within the superelevation transition of such curves are excluded from a test with the profilograph. The profilogram shall terminate 15 feet from each transverse joint that separates the pavement from a bridge deck, bridge approach slab or existing pavement not constructed under the contract.

A profilogram will be made on the final surface lift. The measurements will be made in the outside wheel path of exterior lanes and either wheel path of interior lanes. The wheel path is designated as being located three feet from the edge of pavement or longitudinal joint. The testing will be limited to a single profilogram for each lane except that a second profilogram will be made on the lots that have been surface corrected. Other profilograms may be made only to define the limits that are out of tolerance.

Acceptance will be made on a segment to segment basis for pavement smoothness. No segment of the lift with a profile index greater than 30.0 inches per mile shall be allowed to

remain in place without correction. For the purpose of determining pavement smoothness and contract price adjustment for rideability, each day's production will be sub-divided into sections which terminate at bridges, transverse joints or other interruptions. Each section will be sub-divided into segments of 528 feet. Where a segment less than 528 feet occurs at the end of a section, it will be combined with the preceding 528-foot segment for calculation of the profile index. The last 15 feet of a day's lift may not be obtainable until the lift is continued and for this reason may be included in the subsequent segment.

A profile index will be determined for each segment as inches per mile in excess of the "Zero" blanking band which is simply referred to as the "Profile Index". From the profilogram of each segment, the scallops above and below the "Zero" blanking band are totaled in tenths of an inch. The totaled count of tenths is converted to inches per mile to establish a smoothness profile index for that segment.

Individual bumps and/or dips that are identified on the profilogram by locating vertical deviations that exceed four tenths of an inch when measured from a chord length of 25 feet or less shall be corrected regardless of the profile index value of the segment.

Scheduling will be the responsibility of the Contractor with approval of the Engineer, and the tests shall be conducted within 72 hours after each day's production unless authorized otherwise by the Engineer. The Contractor will be responsible for traffic control associated with this testing operation.

907-403.01.8.2--Computerized Profilograph.

907-403.01.8.2.1--General The computerized profilograph, furnished and operated by the Contractor under the supervision of the Engineer, shall be equipped with an on-board computer capable of meeting the following conditions.

Vertical displacement shall be sampled every three (3) inches or less along the roadway. The profile data shall be bandpass filtered in the computer to remove all spatial wavelengths shorter than two (2) feet. This shall be accomplished by a third order, low pass Butterworth filter. The resulting band limited profile will then be computer analyzed according to the California Profilograph reduction process to produce the required inches per mile index. This shall be accomplished by fitting a linear regression line to each 528 feet of continuous pavement section. This corresponds to the perfect placement of the blanking band bar by a human trace reducer. Scallops above and below the blanking band are then detected and totaled according to the California protocol. Bump/Dip analysis shall take place according to the California Profilograph reduction process.

The computerized profilograph shall be capable of producing a plot of the profile and a printout which will give the following data: Stations every twenty five (25) feet, bump/dip height and bump/dip length of specification (4/10 of an inch and 25 feet respectively), the blanking band width, date of measurement, total profile index in inches per mile for the measurement, total length of the measurement, and the raw inches for each tenth mile segment.

907-403.01.8.2.2--Mechanical Requirements. The profilograph shall consist of a frame twenty five (25) feet long supported at each end by multiple wheels. The frame shall be constructed to be easily dismantled for transporting. The profilograph shall be constructed from aluminum, stainless steel and chromed parts. The end support wheels shall be arranged in a staggered pattern such that no two wheels cross a transverse joint at the same time. The relative smoothness shall be measured by the vertical movement of an eight (8) inch or larger diameter sensing wheel at the midpoint of the 25-foot frame. The horizontal distance shall be measured by a twenty (20) inch or larger diameter pneumatic wheel. This profile shall be the

mean elevation referenced to the twelve points of contact with the pavement established by the support wheels. Recorded graphical trace of the profile shall be on a scale of one inch equals one inch (full scale) vertical motion of the sensing wheel and one inch equals 25 feet horizontal motion of the profilograph.

907-403.01.8.2.3--Computer Requirements. The computer shall have the ability to produce output on sight for verification. The computerized output shall indicate the profile index for each specified section of roadway. Variable low and high pass third-order Butterworth filtering options shall be available. The printout shall be capable of showing station marks automatically on the output. Blanking band positioning for each specified section of the roadway shall be placed according to the least squares fit line of the collected data. Variable bump and dip tests shall be available to show "must correct" locations on the printout. The computer must have the ability to display on screen "must correct" conditions and alert the user with an audible warning when a "must correct" location has been located. The computer must have the ability to store profile data for later reanalysis. The measurement program must be menu driven and IBM compatible. User selected options, identification, calibration factors, and time and date stamps shall be printed at the top of each printed report for verification. The control software must be upgradeable. A power source shall be included for each profilograph and be capable of supplying all power needs for a full days testing.

907-403.01.9--Third Party Rights. The Contractor's duties herein extend for the benefit of the Department, and no other duties, express or implied, are created herein. No third parties shall have the right to bring any claims, causes of actions, suits, demands, civil actions or any proceedings for any breach of any duty arising hereunder unless said third party can demonstrate an express contractual relationship with or through the Contractor (as a Subcontractor of any tier) which entitles it to the benefit of the duties set out herein.

907-403.02--Blank.

907-403.03--Truck Scales. The specifications, tolerances and regulations for commercial weighing and measuring devices as recommended by the National Bureau of Standards [National Institute of Standards and Technology (NIST) Handbook 44] shall govern truck scales used in the State of Mississippi, except weighing devices with a capacity of ten thousand (10,000) pounds or more used to weigh road construction materials (i.e. sand, gravel, asphalt, fill dirt, topsoil and concrete) shall have a tolerance of one-half of one percent (1/2 of 1%) in lieu of the requirements of Handbook 44 and shall be regulated by the Mississippi Department of Transportation.

Scales shall be checked and certified by a scale company certified in heavy truck weights by the Mississippi Department of Agriculture and Commerce. In the case of scales used for measurement of materials on Department of Transportation projects, certification shall be performed in the presence of an authorized representative of the Department or a copy of the certification may be furnished for scales that have been checked and certified within the last six months for use on other Department of Transportation projects and are still in the position where previously tested. Scales that have not been checked and certified under NIST Handbook 44 guidelines, except for the herein modified tolerances allowed, shall be so checked and certified prior to use for measurement of materials on Department of Transportation projects. Tests shall be continued on six month intervals with the test conducted in the presence of an authorized representative of the Department.

Truck scales shall be accurate to one-half of one percent of the applied load, shall be sensitive to 20 pounds, and shall have a graduation of not more than 20 pounds.

The Contractor may use an electronic weighing system in lieu of truck scales.

The Contractor shall provide MDOT with a certified copy of the haul tickets as required below. All recorded weights shall be in pounds and shall be accurate to within one-half of one percent of the true weight, and the system shall be sensitive to 20 pounds. The Engineer may require random loads to be checked on certified platform scales at no cost to the Department.

When an electronic weighing system utilizes the plant scales of a batch plant, the system may be used only in conjunction with a fully automatic batching and control system.

907-403.04--Method of Measurement. Maintained HMA Pavement will be measured for payment by the ton based on the quantity of mixture placed, completed and accepted. The Contractor shall provide the Department a copy of the haul ticket for each load when delivered to the project site with the following information:

MDOT, Contractor's name, project number, county, ticket number, load number, pay item number, item description of the material delivered, date, time of day, haul vehicle number, gross weight, tare weight, net weight and total daily net weight.

In addition, the Contractor will present certified records of shipment for the quantities placed under this special provision to the Project Engineer on a monthly basis for payment on the progress estimate. Upon completion of the placement of all HMA, and prior to final payment, the Contractor will furnish the Project Engineer with a final certification of quantities shipped. The final certification will recapitulate the monthly submittals and show the total of all HMA incorporated into the project.

The Contractor will be paid for the quantity of HMA measured for pavement as shown above or 105 % of plan quantity, whichever is less. Plan quantities are estimated based on a HMA weight of 110 pounds per square yard per inch of thickness.

907-403.05--Basis of Payments. Maintained Asphalt Pavement, measured as provided above, will be paid for at the contract unit price per ton of mixture, which price will be full compensation for furnishing, preparing, hauling, mixing and placing all materials; for compacting mixtures; maintenance bond, and performing maintenance work; for the Project Management Plan, testing, record keeping and sampling; for traffic control; and all labor, tools, equipment and incidentals necessary to complete the work.

The final surface lift will be tested for smoothness using a profilograph according to the procedures in Subsections 907-403.01.8. The following adjustment schedule lists the price adjustments as a function of the Profile Index for each lot:

Profile Index inches / mile / segment	Adjustment Price percent of modified HMA bid price *
less than 10.0	108
10.0 to 14.0	106
14.1 to 18.0	104
18.1 to 22.0	102
22.1 to 30.0	100
over 30.0	100 (with correction of PI = 30.0)

* The modified HMA bid price is defined as 85 (eighty five) percent of the contract bid price for Maintained HMA Pavement.

The final contract price is equal to fifteen percent (15%) of the contract bid price plus the adjusted price determined for the HMA in the above table.

Contract price adjustments for smoothness shall only be applicable to the final surface lift and furthermore to only the lot(s) or portions of the lot(s) that require smoothness to be determined.

Payment will be made under:

907-403-F: Maintained Hot Mix Asphalt

- per ton

APPENDIX 'A'

HOT MIX ASPHALT (HMA)

- I. **Description.** This appendix includes general guidelines that are applicable to all types of HMA.

Work consists of constructing one or more lifts of HMA in reasonably close conformity with the lines, grades, thicknesses and typical sections shown on the plans.

A. **Definitions.**

Maximum Sieve Size - Maximum sieve size is the smallest sieve size at which 100 percent of the aggregate passes.

Nominal Maximum Sieve Size - The nominal maximum sieve size is one sieve size larger than the first sieve to retain more than 10 percent of the aggregate.

Maximum Density Line - The maximum density line is a straight line plot on the FHWA 0.45 power gradation chart which extends from the zero origin point of the chart through the plotted point of the combined aggregate gradation curve on the nominal maximum sieve size.

II. **Materials.**

A. **Aggregates.**

1. **Coarse Aggregates.** Coarse aggregate, material retained on the No. 8 sieve, should be either crushed stone, slag, or granite; shell; expanded clay; expanded shale; crushed reclaimed concrete pavement; reclaimed asphalt pavement; crushed gravel or combination thereof.

The percentage of wear should not exceed 45 when tested in accordance with AASHTO Designation: T 96.

When tested in accordance with AASHTO Designation: T 19, the dry rodded unit weight of all aggregates except expanded clay and shale should not be less than 70 pounds per cubic foot, and crushed slag used in the surface course should have a dry rodded unit weight of not more than 90 pounds per cubic foot except the maximum unit weight is waived for chromium slag.

The coarse aggregate should be free of any injurious coating which will prohibit the adherence of asphalt to the aggregate particles.

The percentage of loss should not exceed 20 when tested for soundness using magnesium sulfate in accordance with AASHTO Designation: T 104.

When used, shell should consist of durable, washed particles of dead clam or dead reef oyster shell, or combination thereof. The shell should be free of objectionable matter such as sticks, mud, clay lumps, cannery or live shell, or other deleterious matter. Not more than five percent by weight of the dredged material should pass the No. 200 sieve; any such material should be dispersed throughout the mass.

Mechanically fractured faces by mass of the combined mineral aggregate coarser than the No. 4 sieve:

<u>Mixture</u>	<u>Percent Fractured Faces, minimum</u>
25 mm	70 (one face)
19 mm	80 (one face)
12.5 mm	90 (two face)
9.5 mm	90 (two face)

The maximum percentage by weight of flat and elongated particles, maximum to minimum dimension greater than 5, should not exceed 10% for all mixtures. This should be determined in accordance with ASTM D 4791, Section 8.4, on the combined mineral aggregate retained on the 3/8" sieve.

2. Fine Aggregates.

Fine aggregate, material passing the No. 8 sieve, should consist of hard, durable particles of naturally disintegrated rock, or material obtained by crushing stone, slag, gravel, reclaimed concrete pavement, reclaimed asphalt pavement, or combination thereof.

Fine aggregate should be free of lumps of clay and friable particles, loam, organic or foreign matter.

Fine aggregate produced by crushing stone, slag or gravel should be manufactured from coarse aggregate as outlined in Section II. A. 1.

Individual sources of fine aggregate should be non-plastic when tested in accordance with AASHTO Designation: T 90.

Natural deposits of fine aggregate should contain no more than 10 percent by weight passing the No. 200 sieve when tested in accordance with AASHTO Designation: T 11.

Individual fine aggregate components should be of such consistency and dryness that a uniform and even flow from the cold feed will be provided.

Of all the material passing the No. 8 sieve and retained on the No. 200 sieve, not more than 60 percent should pass the No. 30 sieve.

3. Combined Aggregate Blend.

	<u>Design Range</u>			
Mixture:	25 mm	19 mm	12.5 mm	9.5 mm
Nominal Max. Sieve Size:	1 inch	3/4 inch	1/2 inch	3/8 inch
<u>Sieve Size</u>	<u>Percent Passing</u>			
1-1/2 inch	100			
1 inch	90-100	100		
3/4 inch	89	90-100	100	
	max.			
1/2 inch	-	89 max.	90-100	100
3/8 inch	-	-	89 max.	90-100
No. 4	-	-	-	89 max.
No. 8	16-50	18-55	20-60	22-70
No. 200	4.0-9.0	4.0-9.0	4.0-9.0	4.0-9.0

The minus No. 40 fraction of the combined aggregate should be non-plastic when tested according to AASHTO T 90. The clay content for the combined aggregate used in underlying layers should not exceed 1.0 percent and used in top layers should not exceed 0.5 percent by weight of the total mineral aggregate when tested according to AASHTO T 88.

- B. Bituminous Materials.** Asphalt cement should be homogeneous, free of water and should not foam when heated to a temperature of 175°C.

The bituminous material used in all types of hot mix asphalt should conform to AASHTO Designation: MP 1, for the performance grade used.

- C. Hydrated Lime.** When used, hydrated lime should meet the requirements of 714.03.2 for lime used in soil stabilization.

III. Job Mix Formula. The HMA should consist of a uniform mixture of asphalt, aggregate, and may contain hydrated lime and antistripping agent and/or other materials.

When Superpave design procedures are used, the applicable sections of AASHTO Designation: MP2-99, TP4-99 and PP28-99 should be referenced.

IV. Contractor's Quality Management Program.

- A. General.** The Contractor shall have full responsibility for quality management and maintain a quality control system. The Contractor shall have responsibility for the initial determination and all subsequent adjustments in proportioning materials used to produce the HMA. Adjustments to plant operation and spreading and compaction procedures should be made immediately when results indicate that they are necessary.
- B. Personnel Requirements.** The Contractor should provide at least one Certified Asphalt Technician-I (CAT-I) full-time during HMA production at each plant site used to furnish material to the project. Sampling should be conducted by a certified technician or by plant personnel under the direct observation of a certified technician. All testing, data analysis and data posting should be performed by the CAT-I or by an assistant under the direct

supervision of the CAT-I. The Contractor should have a Certified Asphalt Technician-II (CAT-II) available to make any necessary process adjustments. Technician certification shall be in accordance with MDOT SOP TMD-22-10-00-000, MDOT HMA Technician Certification Program. An organizational chart, including names, telephone numbers and current certification, of all those responsible for the quality control program should be posted in the contractor's laboratory while the asphaltic paving work is in progress.

C. Testing Requirements. As a minimum, the Contractor's quality management program should include the following:

- (1) Bituminous Material. The Contractor should have independent testing performed on the bituminous material.
- (2) Fractured Face Count. The Contractor should determine fractured face content of aggregates retained on the No. 4 sieve. A fractured face is defined as a mechanically fractured surface having an area not less than the approximate cross-sectional area of the aggregate particle.
- (3) Mixture Gradation. The Contractor should conduct extraction tests for gradation determination of the mixture.
- (4) Total Voids and VMA. The Contractor should determine total voids and voids in mineral aggregate (VMA), at N_{Design} , from the results of bulk specific gravity tests on laboratory compacted specimens. The compactor shall be set to the required number of revolutions for N_{Design} .
- (5) Asphalt Content. The Contractor should determine the asphalt content.
- (6) Stripping Tests. The Contractor should conduct a stripping test at the beginning of each job-mix production and thereafter, as deemed necessary.
- (7) Roadway Density Tests. The Contractor should conduct density tests as necessary to control and maintain compaction.
- (8) Quality Control Charts. The Contractor should plot all test data for the following items as a minimum:

Mixture Gradation (Percent Passing Sieves)
 Asphalt Content, Percent
 Maximum Specific Gravity
 Total Voids @ N_{Design} , Percent
 VMA @ N_{Design} , Percent

The Contractor should keep charts up-to-date. The Contractor should note any process changes or adjustments on the Air Voids chart.

D. Documentation. The Contractor should document all observations, records of inspection, adjustments to the mixture, and test results. The Contractor should record the results of observations and records of inspection as they occur in a permanent field record. The Contractor should record all process adjustments and job mix formula (JMF) changes on the air void charts.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-403-18

CODE: (SP)

DATE: 02/10/2003

SUBJECT: Hot Mix Asphalt (HMA)

Section 403, Hot Bituminous Pavement, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is deleted in toto and replaced as follows:

SECTION 907-403 - HOT MIX ASPHALT PAVEMENT

907-403.01--Description. This work consists of constructing one or more lifts of HMA pavement meeting the requirements of Section 907-401 on a prepared surface in accordance with the requirements of this section and in reasonably close conformity with the lines, grades, thicknesses, and typical cross sections shown on the plans or established by the Engineer. This work shall also include applicable in-grade preparation of the underlying course in accordance with Section 321.

907-403.02--Material Requirements. Materials and their use shall conform to the applicable requirements of 907-401.02.

907-403.03--Construction Requirements.

907-403.03.1--General. Construction requirements shall be as specified in 907-401.03 except as otherwise indicated in this section or applicable special provisions.

907-403.03.2--Smoothness Tolerances. Except as noted herein, the finished smoothness of each lift shall conform to the designated grade and cross section within the following tolerances from grade stakes or other grade reference points set at 25 foot intervals:

	Lower* & Leveling Lifts	Lower* Intermediate Lift	Top Intermediate Lift	Surface Lift
Max. deviation from grade and cross sec- tion at any point	1/2"	3/8"	1/4"	1/4"
Max. deviation from a 10 foot straight edge	3/8"	1/4"	1/8"	1/8"
Profile Index (PI) (inches/mile)	-	-	45.0	30.0

Note: Where more than four (4) lifts of HMA are required, all lifts, excluding the top three (3) lifts, shall meet the requirements of the lower lift.

* When tested longitudinally from a stringline located equidistant above points 50 feet apart, the distance from the stringline to the surface at any two points located 12 1/2

feet apart shall not vary one from the other more than the maximum deviation allowed above from a 10 foot straight edge.

Where only one intermediate lift is required, it shall meet the smoothness requirements for lower intermediate lifts and shall have a Profile Index of not more than 60.0 inches per mile. The surface lift shall have a Profile Index of not more than 30.0 inches per mile.

Where only a leveling lift and a surface lift are required, the surface lift shall meet the smoothness requirements for lower intermediate lifts, and shall have a Profile Index of not more than 60.0 inches per mile.

Where only a surface lift is required, the Contractor shall determine the existing surface profile index at no additional cost to the State. The finished surface lift shall have a profile index of sixty percent (60%) of the profile index of the existing surface or 60.0 inches per mile, whichever is greater.

Where milling is required to remove undesirable material and/or correction of the cross-slope and only one (1) lift is required, the lift shall have a Profile Index of not more than 45.0 inches per mile.

Where milling is required to remove undesirable material and/or correction of the cross-slope and a leveling lift and a surface lift are required, the surface lift shall have a Profile Index of not more than 45.0 inches per mile.

Where milling is required to remove undesirable material and/or correction of the cross-slope and two (2) lifts are required, the lower lift shall have a Profile Index of not more than 45.0 inches per mile and the surface lift shall have a Profile Index of not more than 30.0 inches per mile.

Grade stakes or other grade reference points set at 25-foot intervals and maximum deviation from grade and cross section will not be required provided an approved profile averaging device is furnished and properly used for the four conditions set forth herein; however, all other surface requirements are applicable.

- (a) Overlays with one overall lift.
- (b) Overlays with two or more overall lifts -- for each lift above the first overall lift provided each underlying overall lift is within the allowable tolerances.
- (c) Surface lift of new construction provided the underlying lift is within the allowable tolerances.
- (d) Full-depth asphalt construction for lifts above the lower lift provided the lower lift is within the specified tolerances for the lower intermediate lift.

Approved contacting type profile averaging devices are those devices capable of working in conjunction with a taut string or wire set to grade, or ski-type device with extreme contact points with the surface at least 30 feet apart. Approved non-contacting type profile averaging devices are laser type ski devices with at least four referencing mobile stations at a minimum length of 24 feet, or an approved equal.

When approved by the Engineer, a short ski or shoe may be substituted for a long ski on the second paving operation working in tandem.

During the finishing and compacting of pavement lifts, it shall be the responsibility of the Contractor to check the surface and joints for progress toward conformance to surface requirements set forth herein. Variations from surface requirements exceeding the allowable tolerances shall be corrected at the Contractor's expense.

When a portland cement concrete pavement is to be placed on a HMA lift, the finished top of the HMA lift shall meet the requirements of Sections 321 and 501.

When the Profile Index for the final surface lift is less than or equal to twenty-two inches per mile (22.0 inches / mile), per segment, a unit price increase will be added. The following schedule lists the Profile Index range and the corresponding contract price adjustment:

Profile Index inches / mile / segment	Contract Price Adjustment percent of HMA unit bid price
less than 10.0	108
10.0 to 14.0	106
14.1 to 18.0	104
18.1 to 22.0	102
22.1 to 30.0	100
over 30.0	100 (with correction of $PI \leq 30.0$)

Contract price adjustments for rideability shall only be applicable to the surface lift and furthermore to only the segment(s) or portions of the segments(s) of the surface lift that require smoothness be determined by using a profilograph and then only when the surface tolerance requirements include a profile index of 30.0 inches / mile.

Segment(s) or portions thereof representing areas excluded from a smoothness test with the profilograph shall also be excluded from consideration for a contract price adjustment for rideability.

Any contract price adjustment for rideability will be applied on a segment to segment basis to the pay tonnage, determined in accordance with Subsections 907-401.02.6.5 and 907-403.04, for the segment(s) or portions thereof for which an adjustment is warranted.

907-403.03.3--Thickness Requirements. Hot mix asphalt overlay lifts shall be constructed as nearly in accordance with the thickness shown on the plans as the underlying pavement and foundation will permit. Periodic and cumulative yield tests will be made to determine practicable conformity to the thickness of each lift. The Engineer may order modifications in placement thicknesses to prevent unwarranted variations in plan quantities.

When the paver is operating off an established grade line, no thickness determination will be required for the various lifts of pavement. It is understood that the tolerances from design grade will control the thickness requirements.

When grade stakes are eliminated by Notice to Bidders or as outlined in 907-403.03.2(d) and where resulting in the placement of two (2) or more lifts, acceptance and payment will be determined on a lot to lot basis by cores taken from the completed pavement. Lots will be coincidental with acceptance lots for the surface lift as provided in 907-401.02.6.4, except that

only lots resulting from the placement of mainline surface lift will be used for thickness assessment. One core will be obtained at random from each lot. Irregular areas will not be cored.

When the average thickness of all the cores from the lots representing a day's production (excluding any discarded by the Engineer for justifiable reason) is within $3/8$ of an inch of the total pavement thickness shown on the plans, excluding lift(s) placed using an established grade line, corrective action will not be required and a price adjustment will not be made for non-conformity to specified thickness.

When the average thickness of all the cores from the lots representing a day's production is deficient in thickness by more than $3/8$ of an inch of the total pavement thickness shown on the plans, excluding lift(s) placed using an established grade line, the deficiency shall be corrected by overlaying the entire length of the day's production. The thickness of the overlay shall be equal to the thickness deficiency but no less than the minimum single lift laying thickness for the specified mixture.

When the thickness of all the cores from the lots representing a day's production is more than $3/8$ of an inch thicker than the total thickness shown on the plans, excluding lift(s) placed using an established grade line, a price adjustment will be made in accordance with 907-403.05.1.

The cores shall be cut and removed by the Contractor in the presence of the Engineer's representative and turned over to the Engineer's representative for further handling. The Contractor shall fill each core hole with surface lift mixture and compact to the satisfaction of the Engineer within 24 hours after coring.

907-403.03.4--Lift Corrections. Pavement exceeding the allowable surface tolerances shall be corrected at the Contractor's expense by the following methods:

Lower, Leveling and Lower Intermediate Lifts:

- (a) Removal or addition of mixture by skin patching, feather edging, wedge lift construction or full depth patching where appropriate and can be completed in a satisfactory manner.
- (b) Superimposing an additional layer which shall be an approved grade raise for the full roadway width and length of the area to be corrected.

Top Intermediate Lift:

- (a) Removal and the addition of sufficient mixture to provide the specified thickness. Corrections by this method shall be square or rectangular in shape and shall completely cover the area to be corrected.
- (b) Superimposing an additional layer (minimum lift thickness for mixture being used) which shall be an approved grade raise for full roadway width of the area to be corrected. Transverse joints shall be perpendicular to the centerline of the pavement.

Surface Lift:

- (a) Removal and the addition of sufficient mixture to provide new material of at least minimum single lift laying thickness for full lane width of the area to be corrected. Transverse joints shall be perpendicular to the centerline of the lane.

- (b) Superimposing an additional layer (minimum lift thickness for mixture being used) which shall be an approved grade raise for full roadway width of the area to be corrected. Transverse joints shall be perpendicular to the centerline of the pavement.

All mixtures used in the correction of unacceptable pavement shall be approved by the Engineer prior to use.

907-403.03.5--Overlays or Widening and Overlays. In addition to the requirements of 907-403.03.1 through 907-403.03.4, the following requirements will be applicable when an existing pavement is to be overlaid or widened and overlaid.

907-403.03.5.1--Blank.

907-403.03.5.2--Sequence of Operations. In order to expedite the safe movement of traffic and to protect each phase of the work as it is performed, a firm sequence of operations is essential. Unless otherwise provided in the traffic control plan and/or the contract, the following appropriate items of work shall be begun and continually prosecuted in the order listed:

- (a) In sections designated by the Engineer, trim the shoulders along the pavement edges to provide drainage from the pavement.
- (b) Perform prerolling to locate areas of pavement with excessive movement (Section 411).
- (c) Perform selective undercutting and patching as directed (Subsection 907-403.03.5.4).
- (d) Perform pressure grouting as specified (Section 412).
- (e) Clean and seal joints (Section 413).
- (f) Complete preparation on one side of roadway to be widened and place widening materials.
- (g) Reconstruct shoulders to elevation necessary to assure traffic safety.
- (h) Open the widened section to traffic.
- (i) Complete above work for other side of roadway.
- (j) Perform preliminary leveling as directed.
- (k) Apply interlayer as specified.
- (l) Place the first overall leveling lift.
- (m) After the first overall leveling lift, reconstruct shoulders as necessary to eliminate vertical differentials which may be hazardous to traffic.
- (n) Place first intermediate lift.
- (o) Construct shoulders to the contiguous elevation of the first intermediate lift.

- (p) Place remaining intermediate lift (if required).
- (q) Place surface lift.
- (r) Complete construction of shoulders.
- (s) Apply permanent traffic marking.
- (t) Final cleanup.

The above operations shall be performed in such a manner that traffic will be maintained on a paved surface at all times. Two-lane, two-way highways should not be restricted to a single lane in excess of a 3,000 foot section.

907-403.03.5.3--Widening of Pavement. The foundation for widening shall be formed by trenching or excavating to the required depth and constructing a smooth, firm and compacted foundation. It shall have sufficient density and stability to withstand the placement and compaction of subsequent lifts. Soft, yielding and other unsuitable material which the Engineer determines will not compact readily shall be removed and backfilled with granular material or hot mix asphalt as directed.

Except as provided herein, excavation for widening, undercutting or other required excavation shall be spread along the edge of the shoulders, foreslopes or other adjacent areas as directed and will be an absorbed item. When the quantity is in excess of what may be used satisfactorily on adjacent areas, the Engineer may direct that the material be loaded, hauled and spread uniformly on other designated areas. In this case, compensation for handling surplus material will be in accordance with the appropriate pay items as provided in the contract or as extra work.

If the plans require widening of the shoulders or embankment with contractor furnished material, all suitable material obtained from widening excavation may be used and will be measured and paid for as Contractor furnished materials. No measurement for payment of haul will be made.

Removal and disposal of old stakes, forms and other debris encountered in excavating shall be in accordance with Section 201 and shall be considered as incidental to and included in the unit prices bid for other items. No separate measurement will be made therefor. Pavement edges and surfaces shall be cleaned prior to final shaping and compaction of adjacent trenching or undercut areas.

Granular material for widening shall be placed on a previously prepared, smooth, firm and unyielding foundation in accordance with the typical section. Density of the granular material shall be as specified.

Hot mix asphalt for widening, including trench widening, shall meet the applicable requirements of this section and Section 401 and shall be placed in one or more layers as shown on the plans or directed. The surface of the mixture shall be finished as a continuation of the adjacent pavement slope.

Trench rollers or other compaction equipment shall be used to compact the foundation, granular material and bituminous mixtures for widening when standard width rolling equipment cannot be used.

907-403.03.5.4--Patching. Existing pavement which has failed or unsatisfactorily stabilized shall be removed as directed. Removal of pavement will be measured and paid for under the appropriate pay items as provided in the contract.

Backfill shall consist of hot mix asphalt or a combination of compacted layers of granular material and hot mix asphalt. Unless otherwise specified, the Engineer will make this determination based on depth and field conditions.

Hot mix asphalt used for backfilling will be measured and paid for at the contract unit price for the mixture designated on the plans as the lowest lift. Granular material will be measured and paid for under the appropriate pay item as provided in the contract or as extra work.

907-403.03.5.5--Preliminary Leveling. All irregularities of the existing pavement that result in a thickness greater than approximately two and one-half inches for the first overall leveling lift shall be corrected by skin patching, feather edging or a wedge lift and shall be approved by the Engineer in advance of placing the first overall lift.

907-403.03.5.6--Placement of Lifts. The leveling lift shall be placed in a layer (or layers) not exceeding approximately two and one-half inches compacted thickness.

When single lane construction is required, placement of a lift on the adjacent lane may be performed by an approved profile averaging device provided the lane previously placed is within the allowable tolerances for all surface requirements. When any of the tolerances are exceeded, the contractor shall reestablish the control stringline for laying the adjacent lane should he elect to perform this work prior to correcting the deficiencies of the lane previously placed. In no case shall a "matching shoe" be used to control the grade of an adjacent lane.

In instances where there are only minor deviations from the allowable tolerances in the first overall lift, the Engineer may permit the Contractor to place the next higher lift by graded stringline in lieu of making the corrections.

Single lane placement of leveling, intermediate and surface lifts shall be limited to the distance covered in one and one-half days in advance of that placed in the adjacent lane.

907-403.03.5.7--Protection of Pavement. The pavement shall be protected and properly maintained until it has been compacted and cooled sufficiently for use by traffic.

907-403.04--Method of Measurement. HMA pavement, complete in place and accepted, will be measured by the ton. The weight of the composite mixture shall be determined in accordance with the provisions of 907-401.03.2.1.11.

Unless shown as a separate pay item, the furnishing and application of the tack coat will not be measured for payment. When payment is provided, tack coat will be measured as set out in 407.04.

The quantity of bituminous mixture required to correct the work, when made at the expense of the Contractor, will not be measured for payment.

Any trenching required for widening will not be measured for payment; the cost thereof shall be included in other items of work.

Undercut required by the Engineer will be measured for payment under the appropriate excavation item as provided in the contract or as extra work. Pavement removal and any required trenching will not be included in the measurement for undercut.

907-403.05--Basis of Payment. Subject to the adjustments set out in 907-401.02.6.3, 907-401.02.6.4, 907-401.02.6.5 & 907-403.03.2, hot mix asphalt pavement, complete-in-place, accepted, and measured as prescribed above, will be paid for at the contract unit price per ton for each lift of pavement specified in the bid schedule and shall be full compensation for completing the work.

907-403.05.1--Price Adjustment for Thickness Requirement. When grade stakes are eliminated as provided in 907-403.03.3 and the average thickness of all cores from lots representing a day's production is more than 3/8 inch thicker than the total specified thickness of the pavement, excluding lift(s) placed using an established grade line, a lump sum reduction in payment for the surface lift of lots representing a day's production will be made as follows:

$$\text{Individual Day's L.S. Reduction} = \frac{(\text{Monetary Value of the Day's Surface Lift Production}) \times (D - 3/8)}{ST}$$

Where:

D = The day's average deviation from total pavement thickness shown on the plans, excluding lift(s) placed using an established grade line.

ST = Specified thickness for surface lift.

The total L.S. reduction for the project is the summation of the individual day's reductions in payment.

907-403.05.2--Pay Items.

Payment will be made under:

907-403-A: Hot Mix Asphalt, $\frac{(1)}{\text{Type}}$, $\frac{(2)}{\text{Mixture}}$ - per ton

907-403-B: Hot Mix Asphalt, $\frac{(1)}{\text{Type}}$, $\frac{(3)}{\text{Mixture}}$, Leveling - per ton

907-403-C: Hot Mix Asphalt, $\frac{(1)}{\text{Type}}$, $\frac{(4)}{\text{Mixture}}$, Trench Widening - per ton

907-403-D: Hot Mix Asphalt, HT, $\frac{(3)}{\text{Mixture}}$, Polymer Modified - per ton

907-403-E: Hot Mix Asphalt, HT, $\frac{(3)}{\text{Mixture}}$, Polymer Modified, Leveling - per ton

(1) ST, MT or HT

(2) 4.75 mm mixture, 9.5 mm mixture, 12.5 mm mixture, 19 mm mixture or 25 mm mixture

(3) 4.75 mm mixture, 9.5 mm mixture, 12.5 mm mixture or 19 mm mixture

(4) 19 mm mixture or 25 mm mixture

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-423-4

CODE: (SP)

DATE: 12/08/2003

SUBJECT: Ground-In Rumble Strips

Section 907-423, Ground-In Rumble Strips, is hereby added to the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows:

SECTION 907-423 -- GROUND-IN RUMBLE STRIPS

907-423.01--Description. This work consists of grinding rumble strips into finished roadway shoulders at required locations and in accordance with the details on the plans and the requirements set out herein.

907-423.02--Blank.

907-423.03--Construction Requirements.

907-423.03.1--Equipment. The equipment shall consist of a rotary type cutting head capable of cutting rumble strips to the dimensions shown on the plans. The cutting head shall have the cutting tips arranged in such pattern as to provide a relatively smooth cut of approximately 1/8 of an inch between peaks and valleys. The cutting head(s) shall be on its own independent suspension from that of the power unit to allow the tool to self align with the slope of the shoulder and/or any irregularities in the shoulder surface.

The finished rumble strips shall be cut to the dimensions as shown on the plans within the allowable tolerance and be perpendicular to the direction of travel. The rumble strips shall be placed in relation to the roadway according to the patterns shown on the plans.

Adequate back-up equipment such as mechanical sweeper/vacuum, water truck, etc. and personnel shall be provided to remove all grindings from the shoulder.

907-423.03.2--Construction Details. The cutting tool shall be equipped with guides to provide a consistent alignment of each cut in relation to the edge line and to provide uniformity and consistency throughout the project. The alignment of the cuts shall not deviate from the path of the edge line.

When the contract requires shoulder paving, the rumble strips shall be cut into the finished shoulder after the final course has been placed, otherwise, rumble strips shall be cut into the existing shoulder material. The debris (grindings) generated from the cutting shall be picked up and removed on a daily basis by use of a sweeper/vacuum or other method approved by the Engineer. The shoulder shall be cleaned prior to opening the adjacent lane to traffic. Any other

method of cleaning debris from the shoulder or roadway other than picking up shall be approved by the Engineer prior to beginning construction. The use of the material from the rumble strips as RAP in the composition of hot mix asphalt mixtures shall require approval by the State Materials Engineer.

The Contractor shall demonstrate to the Project Engineer the ability to achieve the desired surface inside each depression without tearing or snagging the asphalt prior to beginning the work. Areas damaged by the Contractor's operations shall be corrected and/or repaired as directed by the Engineer at no cost to the State.

When placed on concrete shoulders, the Contractor shall adjust the spacing of the rumble strips to ensure that the depressions are not cut across a concrete shoulder joint.

This construction operation will encroach on the lane adjacent to the shoulder receiving the rumble strips. Therefore, construction on roadways under traffic will either require a lane closure or be considered as a moving operation. Traffic control shall be handled in accordance with the appropriate standard drawings shown in the plans or contract documents.

907-423.04--Method of Measurement. Rumble strips, ground-in, completed in accordance with the plans and specifications, will be measured by the mile, which price shall be full compensation for all materials, equipment, tools, disposal of grinding debris, any associated traffic control, and all incidentals necessary to complete the work. Length of measurement will start at the beginning of a continuous series of rumble strips and will terminate at the end of the continuous series. The length used to measure rumble strips will be the horizontal length computed along the stationed control line. Each shoulder on which rumble strips have been ground will be measured separately with the measurements from each shoulder combined to obtain the pay length for rumble strips.

907-423.05--Basis of Payment. Rumble strips, measured as prescribed [above](#), will be paid for at the contract unit price per mile, which price shall be full compensation for completing the work.

The price for rumble strips shall include the cost of any required maintenance of traffic and protective services.

Payment will be made under:

907-423-A: Rumble Strips, Ground-In - per mile

907-423-B: Rumble Strips, Ground-In, Concrete - per mile

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-606-7

CODE: (IS)

DATE: 4/24/98

SUBJECT: Terminal End Sections

Section 606, Guard Rail, of the 1990 Edition of Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-606.02--Materials. After the second paragraph of Subsection 606.02 on page 606-1 add the following:

Terminal end sections, installed as per manufacturer's recommendations, shall be National Cooperative Highway Research Program (NCHRP) Report 350 Test Level 3 (TL-3) approved. The following is a list of the current devices that have met NCHRP Report 350.

1. BEST
2. ET-2000
3. FLEAT-350
4. SKT-350
5. SRT-350

Terminal end sections shall be one of the above listed devices or an approved equal.

The Contractor shall furnish the Project Engineer two (2) copies of the manufacturer's installation instructions prior to beginning guard rail operations.

907-606.05--Basis of Payment. Add the following pay item to the list on page 606-3:

907-606-E: Guard Rail (Terminal End Section)

- per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-618-16

CODE: (IS)

DATE: 11/10/98

SUBJECT: Placement of Temporary Traffic Stripe

Section 618, Maintenance of Traffic and Traffic Control Plan, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-618.03 -- Construction Requirements.

907-618.03.3 -- Safe Movement of Traffic. Delete the third paragraph of Subsection 618.03.3 on page 618-3 and substitute the following:

A longitudinal pavement edge that traffic is expected to move across should have an elevation difference of not more than $2\frac{1}{4}$ inches. If the pavement edge is more than $1\frac{1}{2}$ inches and less than or equal to $2\frac{1}{4}$ inches, uneven pavement signs will be required as shown in the plans or contract documents. If the pavement edge is less than or equal to $1\frac{1}{2}$ inches, no uneven pavement signs will be required. Transverse pavement joints shall be sufficiently tapered to allow for the safe movement of traffic.

When a paving operation produces a longitudinal pavement edge that traffic is expected to move across, the adjacent lane shall be constructed to eliminate any uneven pavement edge within 48 hours, unless prohibited by weather conditions or an emergency arises.

Delete the last paragraph on page 618-3 under Subsection 618.03.3 and substitute:

All centerline, lane lines, edge lines and no-passing stripes that have been covered or removed during the day's operations shall be replaced with temporary stripe before work is discontinued for the day or as soon thereafter as weather conditions will permit, except that:

- (1) Replacement of no-passing stripes may be delayed for a period not to exceed three (3) days for a two or three lane road.
- (2) Temporary edge lines may be eliminated on projects requiring shoulders constructed of granular material.
- (3) Temporary edge lines placed on the final pavement course of projects requiring paved shoulders without surface treatment shall be placed in the permanent stripe location, otherwise temporary edge lines on projects requiring paved shoulders may be placed on the adjacent shoulder in as near the permanent location as possible.

Temporary no-passing stripe is not considered a major item of work and such stripe which is eliminated because of placing the next course prior to expiration of the 3-day period shall not result in a monetary adjustment to the Contractor as provided in 104.02. All temporary stripe shall be placed in accordance with the plans and Subsection 907-619.03.2.

Delete the first sentence of the first paragraph on page 618-4 under Subsection 618.03.3 and substitute the following:

In addition to the temporary no-passing stripe, the Contractor shall erect standard "DO NOT PASS," "NO-PASSING ZONE," and "PASS WITH CARE" signs in accordance with plan details or as specified in the MUTCD.

Delete the last sentence of the third paragraph on page 618-4 under Subsection 618.03.3 and substitute the following:

All temporary stripe shall be maintained in good order until placement of the permanent pavement markings or placement of the next pavement course or until removed. Maintenance of temporary stripe may require more than one application over the life of the project. Payment will be made for one application only.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-619-18

CODE: (IS)

DATE: 07/24/2002

SUBJECT: Temporary Pavement Markings

Section 619, Traffic Control for Construction Zones, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-619.03--Construction Requirements.

907-619.03.2--Temporary Stripe. Delete in toto Subsection 619.03.2 on page 619-4 and substitute the following:

Temporary stripes are pavement markings, temporary in nature, such as those used to direct traffic from its customary path or those to be removed from the pavement course under use for further temporary traffic control or those to be covered by the next pavement course and/or those to be replaced by permanent stripes. Temporary stripes shall be paint or preformed tape as designated on the plans or when not designated, the use of paint or tape will be at the Contractor's option. Temporary stripes on surface treatments shall be paint.

All temporary stripe shall be placed in accordance with the plans and the requirements set out in Section 625, except that alignment of temporary stripe placed on underlying courses shall have a tolerance of four inches in fifty (50) feet from true alignment for skip stripes and edge lines and one inch in fifty (50) feet from true alignment for no-passing stripes and lane lines. When preformed tape is used on the final pavement course for temporary traffic markings, it shall be removed at no additional cost to the State.

Temporary paint stripe requiring removal shall be removed by carefully controlled blast cleaning, approved grinding or other approved methods in such a manner that the surface to which the stripe was applied will not be unnecessarily marred or damaged. Preformed tape is to be removed in accordance with the manufacturer's recommendations.

Temporary paint stripe which has been placed on the final pavement course may be left in place and covered with permanent stripe of the same color provided the temporary stripe has been satisfactorily placed in the proper location. Under this condition, any remaining temporary paint stripe not covered by the permanent stripe shall be removed at no additional cost to the State.

Painted traffic stripe which has been removed from the final asphalt pavement surface shall be sealed with an approved sealant. The Engineer may waive the sealant requirement when the area to be sealed is insignificant. This sealing operation shall be performed at no additional costs to the State.

All temporary pavement markings placed and measured for payment under this section shall include any required removal. Removal of all temporary stripe will not be measured for separate payment.

Existing pavement markings conflicting with temporary markings shall be removed. Removal of such materials (paint, tape, marker, etc.) will be measured and payment made under Section 202. When measuring removal of pavement markings for payment, the skips will not be included in the measurement.

907-619.03.3--Short-term Stripe. Delete in toto Subsection 619.03.3 on pages 619-4 and 619-5.

907-619.04--Method of Measurement. Delete the second full paragraph on page 619-7 and substitute the following:

Temporary stripe, completed and removed in accordance with the requirements of this Section, will be measured as provided for painted traffic markings in 625.04, except as follows: Detail traffic stripe will be measured by the linear foot from end-to-end of individual stripes. Measurement will be made along the surface of each stripe and will exclude nominal skip intervals where specified. Stripes more than four inches in width will be converted to equivalent lengths of four-inch widths. Legend, which is to include railroad markings, pedestrian crosswalks and stop lines, will be measured by the square foot or linear foot. Pay areas of individual letters and symbols will usually be shown on the plans and measured by the square foot. Transverse railroad bands, pedestrian crosswalks and stop lines will generally be measured by the linear foot, in which case, stripes more than four inches in width will be converted to equivalent lengths of four-inch widths.

907-619.05--Basis of Payment. Add the "907" prefix to pay item numbers 619-A1, 619-A2, 619-A3, 619-A4, 619-A5 and 619-A6 in Subsection 619.05 on page numbers 619-7 and 619-8.

Delete in toto the pay item numbers, descriptions and units for pay item numbers 619-B1, 619-B2, 619-B3, 619-B4, 619-B5 and 619-B6 from Subsection 619.05 on page 619-8.

After pay item number 619-C5 on page 619-9 add the following:

- | | | |
|---------------|--|------------|
| 907-619-C6: | Red-Clear Reflective High Performance Raised Marker | - per each |
| 907-619-C7: | Two-Way Yellow Reflective High Performance Raised Marker | - per each |
| 907-619-C8: | One-Way Clear Reflective High Performance Raised Marker | - per each |
| 907-619-C9: | One-Way Yellow Reflective High Performance Raised Marker | - per each |
| 907-619-C 10: | Yellow Clear Reflective High Performance Raised Marker | - per each |

- * Delete the last paragraph of Subsection 619.05 on page 619-10 and substitute the following: The description for temporary traffic stripe will be shown as "paint" or "tape". In the case of "tape" the type will also be designated. When the description is not designated, the use of "paint" or "tape" will be at the Contractor's option.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| SPECIAL PROVISION NO. **907-619-22**

CODE: (IS)

| DATE: **06/18/2003**

SUBJECT: Traffic Control for Construction Zones

Section 619, Traffic Control for Construction Zones, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-619.02.4--Construction Signs. Delete the last sentence of the second paragraph of Subsection 619.02.4 on page 619-1 and substitute:

Standards for height of construction signs shall be those shown for roadside signs in Chapter 6F of the Manual of Uniform Traffic Control Devices (MUTCD). Signs mounted on portable supports or barricades may be at lower heights but the bottom of the sign shall be no less than one foot above the traveled way.

Delete the third paragraph of Subsection 619.02.4 on page 619-1 and substitute the following:

Unless specified otherwise, fluorescent orange reflective sheeting, meeting the requirements of Subsection 721.06, shall be used on all construction signs regardless of whether used during daytime or nighttime hours.

Delete the fourth paragraph of Subsection 619.02.4 on page 619-1 and substitute the following:

Unless otherwise specified on the plans, the material on which the reflective sheeting is to be applied shall be 16 gauge (minimum) steel, 0.080" (minimum) aluminum, or 5/8" (minimum) high density overlaid plywood. Ungalvanized steel, exterior grade plywood and lumber shall have a minimum of two coats of paint on front, back, and edges. High density overlaid plywood shall have the edges painted. The material to which reflective sheeting is to be applied shall be prepared in accordance with the recommendations of the sheeting manufacturer.

| **Delete** the third sentence of the **sixth** paragraph of **Subsection 619.02.4** on page 619-2 and substitute the following:

If tested by the Central Laboratory, the reflective sheeting shall have at least 50 percent of the reflectivity specified for new sheeting.

| **907-619.02.5--Advance Warning Flashing Arrow Panels.** Delete in toto Subsection 619.02.5 on page 619-2 and substitute:

907-619.02.5--Advance Warning Flashing Arrow Panels. Flashing arrow panels shall meet the requirements of Section 6F.53 of the MUTCD.

| **907-619.02.6--Concrete Median Barrier and Delineators.** Delete **in toto** Subsection 619.02.6 on pages **619-2 & 619-3** and substitute:

907-619.02.6--Concrete Median Barrier and Delineators. Precast concrete median barrier shall meet the requirements of the plans, contract documents, and Section 615 except the surface may be a Class 1 ordinary surface finish unless designated otherwise. When precast concrete median barriers are no longer needed at one location, as determined by the Engineer, the barriers shall be removed and reset at other designated locations. When barriers have to be stored until needed at another location, payment for removing and resetting will not be made until they are reset at their designated location. The Contractor shall furnish the storage area.

The Engineer may allow the installation of used barriers for temporary traffic control upon an inspection and determination that the barrier units are structurally adequate for their intended purpose. Barriers with small chips or fractures not affecting their integrity may be accepted.

Precast concrete barriers used on this project which were purchased or manufactured after October 1, 2002 must meet the requirements of NCHRP Report 350. Precast median barriers purchased or manufactured prior to October 1, 2002 may be used until they complete their normal service life.

Certification of precast concrete barriers shall be as required in the Notice to Bidders titled "Certification of Traffic Control Devices".

Delineators shall be listed on the Department's "Approved Sources of Materials" and meet the requirements of the plans and Section 6F.68 of the MUTCD.

907-619.02.7--Channelization Devices, Barricades, and Warning Lights. Delete in toto Subsection 619.02.7 on page 619-3 and substitute:

907-619.02.7--Channelization Devices, Barricades, and Warning Lights. Channelization devices, vertical panels, tubular markers, cones, drums, barricades and temporary raised islands shall meet the requirements of the plans and Sections 6F.55 through 6F.64 of the MUTCD. Drums shall be constructed of lightweight, deformable material capable of retaining reflective sheeting. Reflective sheeting for drums shall be Type III meeting the requirements of 721.06. Warning lights shall meet the requirements of Section 6F.72 of the MUTCD.

907-619.02.8--Traffic Signals and Flashers. Delete in toto Subsection 619.02.8 on page 619-3 and substitute:

907-619.02.8--Traffic Signals and Flashers. Traffic signals and flashers shall meet the requirements of the plans and Sections 6F.71 & 6F.74 of the MUTCD.

907-619.02.9--Impact Attenuators. Delete in toto Subsection 619.02.9 on page 619-3 and substitute:

907-619.02.9--Impact Attenuators. Impact attenuators must be listed on the Department's "Approved Sources of Materials".

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-619-24

CODE: (SP)

DATE: 09/22/2003

SUBJECT: Changeable Message Signs

Section 619, Traffic Control for Construction Zones, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-619.02--Material Requirements.

After Subsection 619.02.11 on page 619-3, add the following:

907-619.02.12--Changeable Message Sign. The changeable message sign shall be trailer-mounted, full size, LED, full matrix, solar powered, portable changeable message sign. The sign shall be capable of on-site operation via onboard keyboard/keypad, and when specified, remote operation via software running under the Windows 2000 Operating System. The entire sign assembly shall be designed and constructed to withstand and operate during a minimum of 75 MPH wind gusts with all outriggers and/or leveling jacks in place. The entire sign assembly, including each component exposed to weather, shall be sealed and water-proofed to prevent water penetration when subjected to rain and gusting winds of 75 MPH. If more than one changeable message sign is specified, they shall all be of the same model and from the same manufacturer. All parts and materials used to construct the changeable message sign shall be new.

When specified, each sign shall be provided either with or without the necessary hardware to control the sign remotely. If provided without the hardware, the sign shall be constructed with wiring in place to provide the connections for the necessary onboard hardware to control the sign remotely. The manufacturer shall supply a serial and/or USB connection within the sign control cabinet so that a laptop computer using the remote software can communicate directly with the sign CPU.

When specified, the sign shall be capable of displaying dynamic, in-situ traffic speeds through the use of an optional traffic radar transducer. The sign shall also be capable of radar interrupt. This option shall interrupt the original user-specified sequence of messages to display the approaching vehicle speeds and/or an alternate sequence of messages as determined by the user. This option shall also have the functionality to display the speeds of the approaching vehicles as a stand-alone sequence.

When specified, each sign shall be NTCIP compliant/compatible.

When specified, each sign shall be provided either with or without the necessary hardware to operate a Highway Advisory Radio (HAR) system. If provided without the hardware, the sign

shall be constructed to provide the required connections to easily add the necessary onboard hardware to operate the HAR.

General. The sign shall be mounted on a portable trailer containing the necessary solar panels, deep-cycle heavy-duty batteries, and battery charger. When specified, gel-type batteries shall be a replacement for deep-cycle heavy-duty batteries. In the event of prolonged lack of sufficient sunlight, the sign batteries shall be capable of being charged while the sign is operating by the use of a standard 120 Volt AC generator. The sign shall be equipped with a male plug-in and a 50-foot long extension cord constructed of a minimum 12-gauge wire for this purpose. This plug-in shall also be capable of charging the sign batteries using standard 120 Volt AC current when the sign is not in use.

When specified, the sign shall be supplied with either the necessary onboard hardware to control the sign remotely, or the required connections to easily add the necessary onboard hardware to control the sign remotely. This hardware shall consist of, but is not limited to, a cellular telephone capable of operating in digital mode, and/or analog mode when specified, the necessary external antenna, communications cables, and the necessary modem for communicating with the sign operating software. The sign shall also be supplied with the necessary software to control the sign from a remote location. This software shall be Windows 2000 compatible for use on any desktop or laptop equipped with a Hayes Compatible Modem, and any necessary software which must be installed on the sign for communication with a remote computer. The cell phone and/or modem shall be capable of communication using the MDOT cell service provider and it shall be the responsibility of the manufacturer/contractor to demonstrate this service. The sign shall be capable of data communications at a minimum transmission speed of 40 kilobytes per second. The sign shall not be dependent on cellular digital packet data type technology for wireless communications.

The software for controlling the sign and sign messages shall be password protected to safeguard against unauthorized use. There shall be a minimum of three (3) levels of password protection. The most restrictive level shall allow an operator to select a preprogrammed sequence of messages for display while restricting access to the computer's sign and sequence programming. The next restrictive level shall allow the operator to access the sign's primary controls such as sign brightness, message and sequence editing, and establishing schedules. The least restrictive level shall allow full access to all controls, passwords, signs parameter display, and diagnostic display.

Sign diagnostics shall include, but not be limited to, LED brightness controls, internal operating temperature, sign status, communications status, radar status and solar status via onboard display and/or when specified, remote software. The sign status shall provide information on the sign operation that includes CPU inputs and outputs, battery voltage, 110 VAC service indicator, low voltage indicator, and photocell ambient light level. The solar status shall provide information on voltage level from the batteries, voltage level for the LED display, sign brightness level, percent of maximum brightness for LED's, and photocell ambient light level.

The sign software shall be capable of scheduling predetermined sequences of messages based on a programmed time and date.

There shall be a minimum of 180 pre-stored, standard signs and messages as detailed in the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD), all capable of being displayed. There shall also be storage space provided for an additional 150 user-programmed signs and/or messages. Each sign CPU shall have the capacity to store a minimum of 150 programmable sequences. Each sequence shall be capable of displaying up to six (6) programmed signs, symbols, or messages. There shall also be provided, as stored data, and capable of being displayed, all graphical symbols of regulatory and warning symbols detailed in the latest edition of the MUTCD.

The sign display shall be capable of displaying both static and dynamic graphics/messages. The sign display shall also be capable of displaying messages in full size to utilize the maximum area of display. It shall also be capable of displaying conventional one, two, or three-line messages for display with a choice of a minimum of nine (9) font sizes.

At least two copies of user manuals shall be provided with each sign. Each manual shall include all operational functions and software required to operate the sign on site and remotely. This manual shall include all wiring diagrams, parts lists, and sign specifications as well as component warranty information. Each copy shall be bound and shall contain laminated sheets.

Trailer Control Cabinet. The control cabinet shall be constructed of aluminum and shall receive an automotive grade protective coating as should the rest of the trailer. The sign cabinet shall be manufactured to withstand all types of adverse weather conditions and shall have screens or filters installed to keep insects out. This control cabinet shall be lockable, internally illuminated, and house the keyboard terminal and control panel. Lighted keys and terminal displays are acceptable. This control cabinet shall be manufactured in accordance with the latest NEMA 3R/4 standards. The control cabinet shall contain all controls and the necessary gauges for monitoring sign activity. All controls shall be labeled using engraved laminated plastic that is a minimum of 1/16-inch thick. These gauges shall include, but are not limited to, a voltmeter, which indicates current battery charge status, and an amp meter, which indicates current/charging status. The provision of this information via digital readout on a control console or panel is acceptable.

Sign Display. The sign display housing shall be constructed of aluminum and shall be composed of a full matrix of LED's. The sign display housing shall be manufactured in accordance with the latest NEMA 3R/4 standards. The sign shall be comprised of easily interchangeable modules that may be individually replaced in the event of failure or damage. The sign display shall have the minimum capability of displaying three lines of 18-inch nominal high text with eight characters per line. The sign display shall be capable of displaying preprogrammed Manual on Uniform Traffic Control Devices (MUTCD) symbolic messages and standard arrows. This sign shall be a full matrix type, not a fixed matrix type. The sign display shall also be capable of displaying user-defined custom messages and graphics. These messages shall be capable of saving for later recall and use. The sign shall be capable of displaying a preprogrammed default message, or no message at all, in the event of a power failure. When displaying text messages, the spacing between lines of text shall be a minimum of six (6) inches and the inter-character spacing shall be a minimum of three (3) inches. The sign shall be capable

of shutting down its LED display if internal cabinet temperatures reach a level that is determined unsafe by the manufacturer. The LED's shall be ITE amber wide angle for both daytime and nighttime viewing at an angle of 17 degrees, shall be rated for a service life of 100,000 hours, and shall have an operating temperature range of between -22°F to +165°F. The associated electronics for operation of display power supply shall be fully operational in the temperature range of -30°F to +165°F. The sign display shall be protected by a non-glaring polycarbonate material of at least ¼ inch thickness. The display shall provide easy access to all components contained within the display housing.

LED Brightness Control. The sign shall be equipped with both automatic and manual controls to adjust the brightness of the LEDs. The automatic control shall be capable of varying the LED brightness by sensing the ambient light level using photocells. The manual brightness control shall be password protected to safeguard against unauthorized use. LED brightness control shall also be contained within the remote operational software.

Sign Trailer. The trailer shall be equipped with a minimum of two wheels with heavy-duty radial tires. It shall be constructed using a minimum of ASTM A36, 3-inch by 3-inch and 3-inch by 5-inch steel tubing both with a minimum of 3/16-inch wall thickness. Each wheel shall be equipped with one locking lug nut. A minimum of four keys for the locking lug nuts shall be supplied for each trailer. The trailer spring leafs shall be rated for 3500 pounds. The wheels shall be 15-inch steel wheels with five lug bolts per wheel. The wheels shall each be fitted with new P 205-75-15B rated tires.

The trailer shall be provided with a minimum of four outriggers or leveling jacks. One outrigger or leveling jack shall be mounted near each corner of the trailer. The length of the leveling jacks shall be such that when the trailer is level, all four jacks and the tongue jack can be lowered into the vertical position. The trailer shall also be provided with a trailer stand mounted on the tongue of the trailer. The trailer stand shall be a corrosion resistant, screw type jack stand which provides up to a 25-inch lift with a pull-pin swivel release that enables the jack to swing up to a horizontal position for towing. The stand shall also include a 6-inch wheel that allows horizontal positioning of the trailer. The jack stand shall be welded, not bolted, to the tongue of the trailer. The trailer shall be provided with legal tail/brake lights, signals, and license plate mounting bracket. The trailer shall be provided with a 2-inch "hammer blow coupler" style hitch capable of being reversible with a 2½-inch Pintle ring. The trailer shall contain the batteries, solar panels, display lift, and control console.

The trailer shall be equipped with an electric or hydraulic lift, or combination thereof, for the sign display. The sign shall also be equipped with a manual backup lift. The display lift shall raise the sign to a minimum of seven feet above the roadway surface. The sign display shall be capable of rotating and locking at any selected angle up to 360 degrees. A positive brake assembly with lockable control arm shall be provided to position the sign display in the desired position. A mast safety pin shall be provided to prevent the sign display from falling in the event of an electric or hydraulic system failure.

All welding shall be performed by certified welders and in accordance to applicable American Welding Society standards. All metal surfaces shall receive a protective coating such as powder

coating, two coats of primer and two coats of finish/color. The finished coating shall be automotive grade.

All cabinets, display cases, battery cabinets and connections shall be NEMA 3R/4 compliant. All cabinets must be completely encased and lockable with a standard padlock. A lockable storage cabinet shall be provided to house various accessories.

The trailer shall have a 6,000-pound capacity hydraulic surge brake system along with a breakaway latch.

Radar. When specified, the sign shall be equipped with a traffic radar operating in the "K" band, in an "approach only" mode. In conjunction with the radar, the sign shall be capable of displaying dynamic, in-situ vehicle speeds. The radar shall be able to interface directly with the CPU and operational software for applications such as vehicle speeds. The unit shall be programmable to allow the interruption of user-defined messages to display vehicle speed and/or alternate messages whenever a settable speed threshold is exceeded. The radar unit shall be encased in an aluminum enclosure with a polycarbonate lens, and the metal portion shall receive the same protective coating, priming, and painting as the rest of the sign.

Warranty. In general, the manufacturer's warranties and/or guarantees shall be delivered to the Engineer prior to final acceptance of the project. All warranties and guarantees shall be made out to the Mississippi Department of Transportation. At a minimum, a one-year on-site warranty shall be required for the trailer, sign, electronics, software, and all other installed and/or attached appurtenances. The warranty begins on the date of the projects final acceptance.

907-619.03--Construction Requirements.

After Subsection 619.03.8 on page 619-6, add the following:

907-619.03.9--Changeable Message Sign. Each changeable message sign shall be installed and continuously operated at the location selected by the Engineer on State right-of-way. The Contractor is advised that selected locations may be outside the planned indicated limits of the project. The Contractor shall perform all work necessary for preparation of the site selected and approved by the Engineer, to insure maximum safety for and sign visibility of the traveling public; and may be required to remove any temporary work at a later date as directed by the Engineer. The Contractor will also place a minimum of two plastic drums in advance of the sign and one beside the sign as long as it is in use. The Contractor shall be required to move the sign to a new location if directed by the Engineer.

The Contractor may be permitted to bring electric power from outside the normal right-of-way for operation of the equipment if the Department determines that the installation operation will not be hazardous to the traveling public. The Contractor will be required to secure a permit from the Department prior to any work by the power company on the right-of-way. The entire cost of providing electrical service, power to operate the equipment, and removal of the power source from the right-of-way shall be borne by the Contractor.

The changeable message sign(s) will remain the property of the Contractor after the Engineer determines that there is no further need for the sign(s) on the project.

907-619.04--Method of Measurement. After the sixth paragraph of Subsection 619.04 on page 619-7, add the following:

Changeable message signs, as described above, will be measured by the unit. When directed, separate measurements will be made for items included in the contract and required for temporary site preparation for the sign as referenced in Subsection 907-619.03.9. Materials for which no pay items are included in the contract will not be measured for separate payment. Separate measurements will not be made for moving the changeable message sign to a new location, but materials used for which pay items are included in the contract and are necessary for repositioning the sign as directed by the Engineer will be measured for separate payment. Removal of materials used for site preparation for changeable message signs will not be measured for separate payment.

907-619.05--Basis of Payment. After the second paragraph of Subsection 619.05 on page 619-7, add the following:

Payment for items required by the Engineer for temporary location of the changeable message sign, and for which pay items are included in the contract, will be made by the individual pay item. No additional payment will be made for having to work outside the planned indicated project limits.

Payment for removal of materials used for site preparation at changeable message sign locations shall be included in the contract bid price for Maintenance of Traffic.

Between pay item nos. 619-E2 and 619-F1 on page 619-9, insert the following:

907-619-E3: Changeable Message Sign (____*) - per each

* Indicate when the sign is "With Remote" and/or "With Radar"

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-625-4

CODE: (IS)

DATE: 9/16/99

SUBJECT: Painted Traffic Markings

Section 625, Painted Traffic Markings, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-625.02--Materials. Delete in toto Subsection 625.02 on page 625-1 and substitute the following:

Paint shall be the color specified and shall meet the applicable requirements of Section 710, as amended.

Application of permanent painted traffic markings shall require Class B (High-Visibility) glass beads; otherwise, Class A (Standard) glass beads shall be required. Glass beads shall meet the requirements of Subsection 907-720.01.

907-625.03.3--Application. Delete the first paragraph of Subsection 625.03.3 on page 625-1 and substitute the following:

The paint shall be applied when the ambient temperature is no less than 50°F, the pavement surface is properly prepared and the temperature of the pavement surface is no less than 50°F.

For temporary traffic stripe, paint and Class A (Standard) glass beads shall be uniformly applied at the rate of not less than one gallon of paint and six pounds of beads per 264 linear feet of four-inch stripe. For permanent traffic stripe, paint and Class B (High-Visibility) glass beads shall be uniformly applied at the rate of not less than one gallon of paint and twelve pounds of beads per 176 linear feet of six-inch stripe.

907-625.03.4--Protection. Delete in last sentence of the second paragraph of Subsection 625.03.4 on page 625-2 and substitute the following:

When public traffic is being maintained, warning signs at the starting end shall be moved forward as sections of stripe dry sufficiently to prevent pick-up under traffic (reference is made to “No Tracking Time” for the particular paint in 907-710.02.2.2).

907-625.04--Method of Measurement. Delete the last sentence of the second paragraph of Subsection 625.04 on page 625-3 and substitute the following:

Stripes more than six inches in width will be converted to equivalent lengths of six-inch stripe.

907-625.05--Basis of Payment. Add the “907” prefix to all pay item numbers listed in Subsection 625.05 on page 625-3.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-626-10

CODE: (IS)

DATE: 9/16/99

SUBJECT: Thermoplastic Traffic Markings

Section 626, Thermoplastic Traffic Markings, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-626.03--Construction Requirements.

907-626.03.2--Construction Details. Delete the first paragraph on page 626-2 under Subsection 626.03.2 and substitute the following:

Unless otherwise directed by the Engineer, traffic stripes that are coincidental with the thermoplastic stripe shall be removed prior to placement of the thermoplastic material, except that temporary paint stripe may be left in place when satisfactorily placed in the proper location. Any temporary stripe not covered shall be removed. Payment for removal of stripe, except temporary stripe, will be made under Section 202.

907-626.04--Method of Measurement. Delete the last sentence of the second paragraph of Subsection 626.04 on page 626-3 and substitute the following:

Stripes more than six inches in width will be converted to equivalent lengths of six-inch stripe.

Delete the last sentence of Subsection 626.04 on Page 626-3 and substitute the following:

Transverse railroad bands, pedestrian crosswalks and stop lines will generally be measured by the linear foot, in which case, stripes more than six inches in width will be converted to equivalent lengths of six-inch widths.

907-626.05--Basis of Payment. After the last pay item listed on page 626-3, add the following:

- | | |
|--|------------|
| 907-626-AA: 6" Thermoplastic Traffic Stripe (Skip White) | |
| () | - per mile |
| Thickness | |
| 907-626-BB: 6" Thermoplastic Traffic Stripe (Continuous White) | |
| () | - per mile |
| Thickness | |
| 907-626-CC: 6" Thermoplastic Edge Stripe (Continuous White) | |
| () | - per mile |
| Thickness | |

907-626-DD:	6" Thermoplastic Traffic Stripe (Skip Yellow) (<u> </u>) Thickness	- per mile
907-626-EE:	6" Thermoplastic Traffic Stripe (Continuous Yellow) (<u> </u>) Thickness	- per linear foot or mile
907-626-FF:	6" Thermoplastic Edge Stripe (Continuous Yellow) (<u> </u>) Thickness	- per mile
907-626-GG:	Thermoplastic Detail Stripe (6" Equivalent Length) (<u> </u>) (<u> </u>) Color Thickness	- per linear foot
907-626-HH:	Thermoplastic Legend (White) (<u> </u>) Thickness	- per square foot or linear foot

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-626-16

CODE: (SP)

DATE: 02/03/2003

SUBJECT: Inverted Profile Thermoplastic Traffic Stripe

Section 626, Thermoplastic Traffic Markings, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as amended by this special provision is applicable for inverted profile thermoplastic traffic stripe only:

907-626.01--Description. This work consists of furnishing materials and placing inverted profile thermoplastic pavement markings in reasonably close conformity with these specifications and the details shown on the plans or established.

907-626.02--Materials.

907-626.02.1--General. This specification covers reflective thermoplastic compound for the placement of Inverted Profile Thermoplastic Pavement Markings on roadway pavement. Thermoplastic marking material shall consist of an alkyd or hydrocarbon based formulation. Material shall be so manufactured as to be applied to the pavement in a molten form, with internal and surface application of glass spheres, and upon cooling to normal pavement temperature, shall produce an adherent, reflectorized pavement marking of specified thickness and width, capable of resisting deformation.

Materials shall be obtained from approved sources as listed on the Department's "List of Approved Sources" for Inverted Profile Thermoplastic Pavement Marking Materials. The material shall not scorch, break down, discolor, or deteriorate when held at the application temperature for four hours or when reheated four times to the application temperature. Temperature-vs-viscosity characteristics of the plastic material shall remain constant when reheated four times, and shall be the same from batch to batch.

The thermoplastic material shall be a product especially compounded for pavement markings. Markings shall maintain their original dimension and shall not smear or spread under normal traffic at temperatures below 140°F. Markings shall have a uniform cross section. Pigment shall be evenly dispersed throughout its thickness. The exposed surface shall be free from tack and shall not be slippery when wet. Material shall not lift from pavement in freezing weather. Cold ductility of the material shall be such as to permit normal movement with the pavement surface without chipping or cracking.

The manufacturers of the thermoplastic compound, glass beads and epoxy primer sealer shall furnish to the Engineer three copies of certified test reports showing results of all tests specified herein and shall further certify that the materials meet all requirements. The Contractor shall provide the warranty as specified herein to the Engineer.

907-626.02.2--Thermoplastic Material. The thermoplastic material shall consist of homogeneously mixed pigments, fillers, resins and glass beads, and shall be available in both white and yellow. The material shall be free from all skins, dirt, and foreign objects. Materials shall conform to AASHTO M 249 with the following modifications:

907-626.02.2.1--Intermixed Glass Beads. The thermoplastic material shall contain a minimum of 40 percent Class H glass beads by weight. Class H glass beads shall meet the requirements of ASTM D 1155, and shall be coated with an adhesion promoting coating which shall also provide moisture resistance as tested by AASHTO M 247, Section 4.4.2. Class H beads shall have a minimum of 70 percent true spheres and the +20 sieve shall be tested visually.

The gradation of the Class H beads shall meet the following:

<u>U. S. Standard Sieve</u>	<u>% Passing</u>
16	99 - 100
20	75 - 100
30	55 - 95
50	10 - 35
100	0 - 5

907-626.02.2.2--Binder Content. The binder content of the thermoplastic material shall be 19 percent minimum.

907-626.02.2.3--Titanium Dioxide. The titanium dioxide shall meet ASTM D 476, Type II, Rutile grade - 10 percent minimum titanium content.

907-626.02.2.4--Yellow Pigment. The yellow pigment for the yellow thermoplastic material shall be five (5) percent minimum.

907-626.02.2.5--Specific Gravity. The specific gravity of the thermoplastic pavement marking material shall not exceed 2.35.

907-626.02.2.6--Flow Characteristics.

907-626.02.2.6.1--Flowability. After heating the thermoplastic material for four (4) hours ± 5 minutes at $425 \pm 3^\circ\text{F}$ and testing flowability, the white thermoplastic shall have a maximum percent residue of 22 percent and the yellow thermoplastic shall have a maximum residue of 24 percent.

907-626.02.2.6.2--Flow Resistance. The material shall exhibit a maximum flow of 10%. The material's ability to form ribs on the markings shall be evaluated by casting a disc of material approximately 3.5 inches wide by 1.0 inch long by and 0.60 inch deep. After the material is cooled to ambient temperature, measure the exact height. The material shall then be stored at 190°F for four (4) hours. After the material is cooled to ambient temperature, re-measure the exact height and express the flow resistance as a flow percentage.

907-626.02.2.7--Reflectivity. The initial reflectance for the in-place marking shall have a minimum reflectance value of 450 mcd/fc/sq. ft. for white and 350 mcd/fc/sq. ft. for yellow, when measured with a Mirolux 12 retroreflectometer.

907-626.02.2.8--Wet Reflectivity. The initial reflectance for the in-place marking when wet shall have a minimum reflectance value of 200 mcd/fc/sq. ft. for white and 175 mcd/fc/sq. ft. for yellow, when measured with a Mirolux 12 retroreflectometer. The stripe shall be wetted utilizing a pump type sprayer for five (5) seconds. After 30 seconds, place the retroreflectometer on the stripe and measure the reflectance.

907-626.02.2.9--Inverted Profile. The thermoplastic pavement marking material shall be applied to have individual profiles having a minimum height of 0.140 inches with the recessed inverted profiles having a thickness of 0.025 to 0.050 inches. The profiles shall be well defined, spaced approximately one (1) inch apart, and not excessively run back together.

907-626.02.3--Drop-On Glass Beads. Drop-on glass beads shall be separated into two (2) classes, as follows:

907-626.02.3.1--Class G Glass Beads. Class G glass beads shall be coated with an adhesion promoting coating which shall also provide moisture resistance as tested by AASHTO M 247, Section 4.4.2 and shall exhibit the following characteristics:

- **Color and Clarity:** The glass beads shall be colorless and clear, and shall be free of carbon residues.
- **Index of Refraction:** minimum 1.50
- **Roundness:** The glass beads shall have a minimum of 80% true spheres per screen for the two highest sieve quantities, determined visually, and a maximum of 3% angular particles per sieve, determined visually. The remaining sieves shall have a minimum of 75% true spheres, determined visually per aspect ratio using microfiche reader.
- **Air Inclusions:** 10% maximum
- **Specific Gravity:** The specific gravity of the glass beads shall be a minimum of 2.50.
- **Gradation:** The gradation of Class G glass beads shall be as follows:

<u>U. S. Standard Sieve</u>	<u>% Retained</u>
12	0
14	0 - 5
16	0 - 20
18	0 - 80
20	10 - 80
30	0 - 50
Pan	0 - 10

907-626.02.3.2--Class H Glass Beads. Class H glass beads shall meet the requirements of ASTM D 1155, and shall be coated with an adhesion promoting coating which shall also provide moisture resistance as tested by AASHTO M 247, Section 4.4.2. Class H beads shall have a minimum of 70 percent true spheres and the +20 sieve shall be tested visually.

The gradation of the Class H beads shall meet the following:

<u>U. S. Standard Sieve</u>	<u>% Passing</u>
16	99 - 100
20	75 - 100
30	55 - 95
50	10 - 35
100	0 - 5

907-626.03--Construction Requirements.

907-626.03.1--Equipment. The application equipment shall be specifically designed for placing thermoplastic material in a hot molten state on the pavement surface utilizing a pressure type application method. The thermoplastic stripe shall be formed by a die that is allowed to drag along in proximity with the pavement surface. The die is pulled forward by a special linkage that will allow it to automatically level itself as to float and remain parallel with the pavement surface. The traffic stripe shall be formed by reason that the hot thermoplastic material is forced under pressure through four sides to the die onto the pavement surface. The top of the die shall be enclosed and provide entry means for the hot molten thermoplastic material to enter the die cavity. The bottom of the die shall contain a movable door that is remote controlled so as to start or stop the flow of thermoplastic material onto the pavement surface. When the movable door is open, thermoplastic material can flow through the die and will apply a thermoplastic stripe that will be formed rearward of the advancing die. The pavement surface shall be at the bottom of the die enclosure. Thermoplastic material shall be fed to the die under pressure through flexible oil-jacketed stainless steel hoses. The thermoplastic material must be either pumped or fed from a pressure vessel to the die under pressure in order to obtain the proper adhesion with the pavement surface.

The system shall consist of a low pressure drop-on type glass bead gun, (bead coat #1). The thermoplastic die shall be oil-jacketed on four (4) sides and is formed from a single solid block of steel. The glass bead gun shall dispense glass beads onto the hot thermoplastic stripe from a height of approximately one (1) inch above the pavement surface. The point at which the glass beads strike the surface of the stripe shall be approximately three inches (3") behind the strike point of the thermoplastic material itself. This reflective bead coat #1 shall utilize Class G glass beads as specified herein, and shall provide a surface coating of 50 percent of the thermoplastic stripe surface. Of this 50 percent stripe coverage, at least 50 percent of the beads shall be embedded to a depth of 60 percent of their diameter.

A second curtain coater, low pressure drop-on type glass bead gun capable of applying a continuous sheet or ribbon of glass beads, shall follow at an interval of approximately 10 inches behind the first bead gun. This second glass bead gun shall apply bead coat #2 which will form a continuous drop-on coat of Class H glass beads immediately in front of the profiling device. This second curtain of glass beads shall have a low impact speed so that they are not forced into the stripe under pressure.

A special rotatable wheel profiling device shall be located approximately eight (8) inches behind bead gun #2. This rotatable wheel device shall be approximately seven (7) inches in diameter and shall have a plurality of spaced projections located around its circumference. The profiling device shall be wider than the stripe being applied in order that the stripe shall be adequately covered. The projections on the rotatable profiling device shall have an angular profiling surface set at an angle to the pavement surface. The rotatable profile device shall be mounted with an automatic leveling device to the same carriage assembly as the thermoplastic gun. This is required so that a traffic stripe of accurate and uniform definition can be obtained. The inverted profile grooves shall be pressed into the hot molten thermoplastic stripe within one (1) second of the thermoplastic material application in order to insure proper bead adhesion to the stripe. Using rollers to place grooves in the traffic stripe utilizing a separate vehicle or grooves that are not pressed within one (1) second of the thermoplastic material application will not be allowed. To insure that no thermoplastic material adheres to the wheel as it rotates and profiles the stripe, a small air atomizer water jet shall apply a thin mist coat of water to the rotatable profile wheel. It is the intent of this specification that a minimum amount of water be used and that no water puddles greater than ¼ inch in diameter

be allowed to accumulate on the pavement surface in proximity to the freshly placed stripe. Excess water on the pavement surface can cause bond failure of the thermoplastic material.

All parts of the thermoplastic holding tank including manifolds, hoses, pipes, dies, etc., shall be oil-jacketed to insure accurate temperature control. The thermoplastic material shall be preheated in kettles designed specifically for that purpose. Each kettle of preheated thermoplastic material shall be properly mixed and heated to the correct application temperature. The preheated material shall then be fed to the thermoplastic gun for application.

The striping machine shall contain enough glass beads and water to apply one full kettle of thermoplastic material.

907-626.03.2--Cleaning of Pavement Surface. Immediately before application, the areas to receive markings shall be cleaned thoroughly using equipment capable of cleaning without damaging the pavement surface. This will include, but not be limited to, all vegetation, loose soil, oils, and other debris. On areas of pavement cured with compound, the membrane shall be removed completely by "shot" blasting, sand blasting or other approved method. Striping shall follow as closely as practical after the pavement surface has been cleaned.

907-626.03.3--Application Over Existing Striping. Where shown on the plans or directed by the Engineer, the existing traffic stripe shall be removed by grinding or sandblasting. When placing Inverted Profile Thermoplastic Pavement Marking on existing pavement that has more than one light coat (pavement not showing through stripe) of striping material, the existing stripe shall be removed to the point that 80 percent of the pavement surface is visible.

Removal of existing stripe will be paid for as a separate item of work.

Where unsatisfactory striping performed by the Contractor must be removed and replaced in accordance with these specifications, the Contractor shall use the removal method described above. No payment will be made for removal or replacement of the Contractor's unsatisfactory striping.

907-626.03.4--Surface Conditions. When placing Inverted Profile Thermoplastic Pavement Markings, no striping shall be permitted when the pavement surface temperature is less than 60°F. A non-contact infrared pyrometer shall be furnished by the Contractor for use by the Engineer for verification of the temperature. Striping shall not be performed when there is moisture on the pavement surface or when winds exceed 12 mph. When unseen moisture is suspected to be present, a moisture test shall be performed. The test shall be as follows:

- 1) Place a piece of roofing felt on the pavement surface.
- 2) Pour 0.5 gallon of thermoplastic material at application temperature onto the paper.
- 3) After two (2) minutes, lift the paper and inspect to see if moisture has been drawn from the pavement.
- 4) If moisture is present, striping is not to begin until the surface is moist free.

Documentation of weather and pavement conditions shall be recorded as part of completing the MDOT Inverted Profile Thermoplastic Pavement Marking Inspectors Report.

907-626.03.5--Application. Prior to the placement of pavement markings, the Contractor shall furnish the Engineer three copies of the manufacturer's warranty stating that the manufacturer will guarantee the pavement marking to meet the requirements of this specification.

The thermoplastic material shall be preheated and thoroughly mixed. The application temperature of the thermoplastic material shall be between 400°F and 430°F. A digital thermometer complete with a 24-inch probe shall be furnished by the Contractor for use by the Engineer for verification of the temperature.

When measured at the highest point of the profile, the cold thickness of the in-place thermoplastic stripe shall be a minimum of 0.140 inch for Inverted Profile Thermoplastic Pavement Markings. The thickness of the thermoplastic material in the bottom of the profiles shall range from 0.025 to 0.050 inch. The individual profiles shall be located transversely across the stripe at intervals of approximately one (1) inch. The bottoms of these intervals shall be between 3/32 inch and 5/16 inch wide. In order to drain water and to reflect light, it is normal for the top surface of the inverted profiles to be irregular. The application rate of thermoplastic material for Inverted Profile Thermoplastic Pavement Markings shall be a minimum of 2700± pounds per mile for a continuous 6-inch stripe.

The application rate for Class G glass beads (bead coat #1) shall be 300± pounds per mile for 6-inch continuous stripe.

The application rate for Class H glass beads (bead coat #2) shall be 300± pounds per mile for 6-inch continuous stripe.

The thickness of the striping materials shall be verified periodically (at least every 1320 feet) and any thickness more than five (5) percent under the designated thickness shall be reworked. A consistent, uncorrected under-run will not be allowed and the Contractor will be required to install the specified minimum thickness of 0.140 inch. A wet thickness gauge and cold thickness gauge shall be furnished by the Contractor for use by the Engineer for the verification of film thickness.

When striping over existing painted stripe (one light coat), on old oxidized asphalt, on all concrete surfaces or on asphalt surfaces when ambient temperatures are below 70°F, a two component epoxy primer sealer shall be used and installed as recommended in writing by the thermoplastic material manufacturer. The epoxy primer sealer shall be EX255/EX256 as manufactured by Crown Paint Company of Oklahoma City, Oklahoma or approved equal. The Contractor shall furnish certification of compatibility of the epoxy primer sealer to be used with the thermoplastic material supplied. If an alternate epoxy primer sealer to the EX255/EX256 is used, the Contractor shall furnish a mill analysis and proof of adequate performance of the alternate epoxy primer sealer when used with thermoplastic pavement markings.

907-626.03.6--Warranty. The manufacturer shall warrant that the inverted profile thermoplastic markings will meet the minimum performance level of 150 mcd/fc/sq. ft. dry and 75 mcd/fc/sq. ft. wet for a period of 48 months from the date of final inspection when exposed to normal roadway conditions regardless of the average daily traffic. Failure to meet this requirement will result in the total replacement of the portion of the stripe shown to be below these minimums. All costs of labor, material and other incidentals necessary for the replacement of unacceptable pavement markings shall be at no additional costs to the State.

Compliance will be determined by an average brightness reading over a minimum zone marking length of 300 linear feet, using a Mirolux 12 reflectometer. The zone of measurement referred to includes centerline stripe, edge lines and skip lines.

Performance Requirements:	White		Yellow	
	<u>Dry</u>	<u>Wet</u>	<u>Dry</u>	<u>Wet</u>
Initial Reflectivity, mcd/fc/sq. ft.	450	200	350	175
48-Month Retained Reflectivity	150	75	150	75

The measurement procedure for this warranty will entail a visual night inspection by a manufacturer representative and a MDOT representative to identify areas of the installation, which appear to be below the specified minimum, warranted reflectance value. All reflectance measurements for dry conditions shall be made on a clean dry surface at a minimum temperature of 40°F. All reflectance measurements for wet conditions shall be made using the setting conditions of Subsection 907-626.02.2.8 at a minimum temperature of 40°F.

Measurement intervals for installations with areas less than, or equal to, three (3) miles shall be at a minimum of three (3) check points for each zone. These check points should include the start point, approximate mid-point and the end point.

Measurement intervals for installations with areas greater than three (3) miles shall be at a minimum of three (3) check points, one at the start point, one at the end point and additional measurements spaced at 3-mile intervals between the start and end points of the area in question.

The number of measurements at each check point for each zone will be as follows:

- (A) Skip Lines: Eighteen (18) measurements, distributed over six (6) skip lines, shall be made at each check point.
- (B) Center Lines and/or Edge Lines: Eighteen (18) measurements shall be made over 300 linear feet of continuous stripe.

When taking reflectivity measurements, the value of the measurement shall be determined by averaging three measurements; one at the left edge of the stripe, one at the center of the stripe and one at the right edge of the stripe.

In addition, the reflectance values measured at each check point shall be averaged by zone to determine conformance to the minimum warranted reflective values.

907-626.04--Method of Measurement. Inverted Profile Thermoplastic Traffic Stripe completed in accordance with the plans and specifications will be measured by the mile or by the linear foot, as indicated, from end-to-end of individual stripes. In the case of skip lines the measurement will include skips. The length used to measure centerline and edge stripes will be the horizontal length computed along the stationed control line.

Inverted Profile Thermoplastic Detail Traffic Stripe will be measured by the linear foot from end-to-end of individual stripes. Measurements will be made along the surface of each stripe and will exclude skip intervals where skips are specified. Stripes more than six (6) inches in width will be converted to equivalent lengths of six-inch widths.

907-626.05--Basis of Payment. Inverted Profile Thermoplastic Traffic Stripe will be paid for at the contract unit price per mile or linear foot, as applicable, which shall be full compensation for completing the work.

Payment will be made under:

907-626-I: 6" Inverted Profile Thermoplastic Traffic Stripe (Skip White)	- per mile
907-626-J: 6" Inverted Profile Thermoplastic Traffic Stripe (Continuous White)	- per mile
907-626-K: 6" Inverted Profile Thermoplastic Traffic Stripe (Skip Yellow)	- per mile
907-626-L: 6" Inverted Profile Thermoplastic Traffic Stripe (Continuous Yellow)	- per linear foot or mile
907-626-M: Inverted Profile Thermoplastic Detail Traffic Stripe (6" Equivalent Length) (_____) Color	- per linear foot

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| SPECIAL PROVISION NO. 907-627-3

CODE: (IS)

| DATE: 4/25/2000

SUBJECT: Raised Pavement Markers

Section 627, Raised Pavement Markers, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-627.02--Materials. Delete in toto Subsection 627.02 on page 627-1 and substitute:

Pavement and jiggle markers of the types specified shall conform to the applicable requirements of 720.03 and shall be listed on the Department's "Approved Sources of Materials".

| Type B through G High Performance reflective markers shall be listed on the Department's "Approved Sources of Materials" for high performance raised pavement markers.

The bituminous adhesive for pavement markers shall meet the requirements of 720.03.7.

907-627.05--Basis of Payment. Add the "907" prefix to all pay item numbers listed in Subsection 627.05 on page 627-3.

After the last line of Subsection 627.05 on page 627-3, add the following:

907-627-J: Two-Way Clear Reflective High Performance Raised Markers	- per each
907-627-K: Red-Clear Reflective High Performance Raised Markers	- per each
907-627-L: Two-Way Yellow Reflective High Performance Raised Markers	- per each
907-627-M: One-Way Clear Reflective High Performance Raised Markers	- per each
907-627-N: One-Way Yellow Reflective High Performance Raised Markers	- per each
907-627-O: Yellow-Clear Reflective High Performance Raised Markers	- per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-628-11

CODE: (IS)

DATE: 9/16/99

SUBJECT: Cold Plastic Pavement Markings

Section 628, Cold Plastic Pavement Markings, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction, is hereby amended as follows:

Delete in toto Subsection 628.01 on page 628-1 and substitute the following:

907-628.01--Description. This work consists of furnishing materials and installing cold plastic pavement markings of the type specified in reasonably close conformity with the plans and these specifications

907-628.02--Materials. After the first sentence of Subsection 628.02 on page 628-1, add the following:

High performance cold plastic marking material shall meet the requirements of 907-720.07.

907-628.03--Construction Requirements.

907-628.03.1--Equipment. After the first sentence of Subsection 628.03.1 on page 628-1, insert the following:

When high performance profile cold plastic pavement markings are used, the manufacturer shall provide application equipment, manual or automatic as necessary for the job requirements. These applicators shall be capable of applying markings to the required alignment and dimensions shown on the plans or in the contract documents.

907-628.05--Basis of Payment. After the last pay item listed in Subsection 628.05 on page 628-2, substitute the following:

907-628-AA: 6" Cold Plastic Traffic Stripe (Skip White)	- per mile
907-628-BB: 6" Cold Plastic Traffic Stripe (Continuous White)	- per mile
907-628-CC: 6" Cold Plastic Edge Stripe (Continuous White)	- per mile
907-628-DD: 6" Cold Plastic Traffic Stripe (Skip Yellow)	- per mile
907-628-EE: 6" Cold Plastic Traffic Stripe (Continuous Yellow)	- per mile or linear foot
907-628-FF: 6" Cold Plastic Edge Stripe (Continuous Yellow)	- per mile

907-628-GG:	Cold Plastic Detail Stripe (6" Equivalent Length) (Color)	- per linear foot
907-628-HH:	Cold Plastic Legend (White)	- per square foot or linear foot
907-628-II:	6" High Performance Cold Plastic Traffic Stripe (Skip White)	- per mile or linear foot
907-628-JJ:	6" High Performance Cold Plastic Traffic Stripe (Continuous White)	- per mile or linear foot
907-628-KK:	6" High Performance Cold Plastic Edge Stripe (Continuous White)	- per mile or linear foot
907-628-LL:	6" High Performance Cold Plastic Traffic Stripe (Skip Yellow)	- per mile or linear foot
907-628-MM:	6" High Performance Cold Plastic Traffic Stripe (Continuous Yellow)	- per mile or linear foot
907-628-NN:	6" High Performance Cold Plastic Edge Stripe (Continuous Yellow)	- per mile or linear foot
907-628-OO:	High Performance Cold Plastic Detail Stripe (6" Equivalent Length) (Color)	- per linear foot
907-628-PP:	High Performance Cold Plastic Legend (White)	- per square foot or linear foot

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-700-4

CODE: (IS)

DATE: 8/17/95

SUBJECT: Buy America

Division 700, Materials and Tests, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-700.01--General. Delete the fourth paragraph of Subdivision 700.01 on page no. 700-1 and substitute the following:

Domestic steel, iron and wire products including prestressing cable and strand shall be furnished for incorporation in the work. All manufacturing processes, including application of a coating, for these materials must occur domestically. However, pig iron and processed, pelletized, and reduced iron ore manufactured outside of the United States may be used in the domestic manufacturing process for steel and/or iron products. For the purpose of this specification, the activity of coating is considered a manufacturing process. The material being applied as a coating is not covered under Buy America. Coating includes all processes which protect or enhance the value of the material to which the coating is applied, such as epoxy coatings, galvanizing, painting, etc.

Add the following paragraph at the end of Subdivision 700.01 on page no. 700-1.

In the case of coatings for the above referenced domestic steel, iron and wire products, it shall be the Contractor's responsibility to forward to the State Materials Engineer a certified statement from those having applied a coating to these materials that the application of the coating occurred domestically.

907-700.05--Material Certifications and Certified Test Reports.

907-700.05.01-- Certifications. Delete paragraph (e) of Subdivision 700.05.1 on page no. 700-6 and substitute the following:

(e) Certification for all iron, steel and steel wire products must also include a certified statement by the manufacturer that all of the manufacturing processes, excluding those for pig iron and processed, pelletized, and reduced iron ore used in the manufacture of said steel and/or iron products, have occurred domestically.

907-700.05.2--Certified Test Reports. Delete paragraph (d) of Subdivision 700.05.2 on page no. 700-6 and substitute the following:

(d) Test reports for all iron, steel and steel wire products must also include a certified statement by the manufacturer that all of the manufacturing processes, excluding those for pig iron and processed, pelletized, and reduced iron ore used in the manufacture of said steel and/or iron products, have occurred domestically.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-700-5

CODE: (IS)

DATE: 4/1/99

**SUBJECT: Use of Crushed Reclaimed Concrete Pavement as an Aggregate
Component of All Hot Mix Asphalt Pavements**

Division 700, Materials and Tests, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-700.01--General.

Remove the period at the end of the second paragraph of Subsection 700.01 on page 700-1 and add the following:

, except that crushed reclaimed concrete pavement meeting the requirements of Section 703, as amended, may be used to produce aggregate for all hot mix asphalt pavements.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-702-10

CODE: (IS)

DATE: 2/17/98

SUBJECT: Petroleum Asphalt Cement and Polymer Modified Petroleum Asphalt Cement

Section 702, Bituminous Materials, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete in toto Subsection 702.05, Petroleum Asphalt Cement, on page 702-2 and substitute the following:

907-702.05--Petroleum Asphalt Cement. Asphalt cement shall be homogeneous, free of water and shall not foam when heated to a temperature of 175°C.

Except for use in hot mix asphalt, asphalt cement of the grade specified shall conform to the requirements of 702.12, Table I or II.

Bituminous material conforming to AASHTO Designation MP 1, Grade PG 58-28 may be used in lieu of petroleum asphalt cement, Grade AC-10.

The bituminous material used in all types of hot mix asphalt shall conform to AASHTO Designation: **MP 1, Performance Grade PG 67-22, as modified in the table below**, except when otherwise specified or when polymer modified hot mix asphalt is specified.

SPECIFICATIONS FOR PERFORMANCE GRADED ASPHALT BINDERS NOT ADDRESSED BY AASHTO MP 1		
Grade		
PG 67-22		
Property	Specifications	Test Method
Original Binder		
Flash Point Temperature	minimum 230°C	AASHTO T 48
Rotational Viscosity	maximum 3 Pa•s @ 135°C	AASHTO TP 48
Dynamic Shear, G*/ sin δ	minimum 1.00 kPa @ 67°C	AASHTO TP 5
Rolling Thin Film Oven Residue (AASHTO T 240)		
Mass Loss (RTFO)	maximum 1.00 %	AASHTO T 240
Dynamic Shear, G*/ sin δ	minimum 2.20 kPa @ 67°C	AASHTO TP 5
Pressure Aging Vessel Residue (AASHTO PP1)		
Dynamic Shear, G*/ sin δ	maximum 5000 kPa @ 25°C	AASHTO TP 5
Creep Stiffness, S	maximum 300 MPa @ -12°C	AASHTO TP 1
m-value	minimum 0.300 @ -12°C	AASHTO TP 1

The bituminous material used in polymer modified hot mix asphalt shall conform to AASHTO Designation: MP 1, Grade PG 76-22.

Asphalt cement Grade PG 76-22 shall be the product resulting from the addition of a polymer modifier to a PG 67-22 or lower grade asphalt cement and not by some other refining technique. The polymer shall meet the requirements of Subsection 907-702.08.3.

907-702.08--Asphalt Additives.

At the end of Subsection 702.08.2 on page 702-4, add the following:

907-702.08.3--Polymers. The polymer shall be a Styrene Butadiene Styrene (SBS), a Styrene Butadiene Rubber (SBR) or an equal approved by the Engineer. The polymer shall be thoroughly blended with the asphalt cement at the refinery or terminal prior to shipment to the hot-mix plant. Producers of polymer modified asphalt cement must be listed on MDOT's Approved List of Suppliers of Polymer Modified Asphalt Cement. The producer of the polymer modified asphalt cement shall perform or have performed by an approved laboratory all tests contained in AASHTO Designation: MP 1 on a lot basis. A lot shall consist of one (1) refinery or terminal storage tank not to exceed 225,000 gallons. The Producer shall furnish two copies of a certified test report (one copy for the Contractor and one copy for the Department Representative) with each shipment. A third copy of the certified test report shall be mailed to the State Materials Engineer. The certified test report shall contain the following:

- (1) Test results showing complete conformance to AASHTO Designation: MP 1
- (2) Type and percentage of polymer added
- (3) A statement certifying that the transport vehicle was inspected prior to loading and was found to be empty
- (4) A statement certifying that the shipment conforms to Mississippi Department of Transportation specifications for the grade of polymer modified asphalt cement specified
- (5) A copy of the temperature-viscosity curve attached to the certified test report.

Crumb rubber used as a polymer modifier shall meet the following additional requirements:

Crumb rubber shall be produced by ambient grinding methods. The rubber shall be sufficiently dry so as to be free flowing and to prevent foaming when mixed with asphalt cement. The rubber shall be free of contaminants including fabric, metal, minerals and other non-rubber substances. Up to four percent (by weight of rubber) of talc (such as magnesium silicate or calcium carbonate) may be added to prevent sticking and caking of the particles.

The crumb rubber shall be tested in accordance with AASHTO Designation: T 27 with the following exceptions: a 100-gram sample size and up to 25% dusting agent (talc). Rubber balls may also be used to aid in the sieving of finely ground rubber. The resulting rubber gradation shall meet the gradation limits shown herein.

Gradations of Crumb Rubber

Type A

<u>Sieve Size</u>	<u>% Passing</u>
10	--
20	--
30	--
40	100
60	98-100
80	90-100
100	70-90
200	35-60

The specific gravity of the rubber shall be 1.15 ± 0.05 when tested in accordance with ASTM Designation: D 297, pycnometer method.

The moisture content shall be determined in accordance with AASHTO Designation: T 255, with the exception that the oven temperature shall be $140 \pm 5^{\circ}\text{F}$ and the weight of the sample shall be 50 grams. The moisture content shall not exceed 0.75% by weight.

No more than 0.01% metal particles shall be detected when thoroughly passing a magnet through a 50-gram sample.

The chemical composition of the crumb rubber shall be determined in accordance with ASTM Designation: D 297 and shall meet the following requirements:

Acetone Extract	- Maximum 25 percent
Rubber Hydrocarbon Content	- 40 to 55 percent
Ash Content	- Maximum 10 percent
Carbon Black Content	- 20 to 40 percent
Natural Rubber	- 16 to 34 percent

Crumb rubber meeting these specifications shall be supplied in moisture resistant packaging such as either disposal bags or other appropriate bulk containers. Each container or bag of crumb rubber shall be labeled with the manufacturer's designation for the rubber and the specific type, maximum nominal size, weight and manufacturer's batch or lot designation.

The producer of the polymer modified asphalt cement shall furnish the State Materials Engineer one copy of the manufacturer's certified test results covering each shipment of crumb rubber. These reports shall indicate the results of tests required by this specification. The reports shall also include a certification that the material conforms with the specifications, and shall be identified by manufacturer's batch or lot number.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-703-18

CODE: (IS)

DATE: 04/15/97

SUBJECT: Aggregates for Hot Mix Asphalt (HMA)

Section 703, Aggregates, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete Subsections 703.04, 703.05, 703.09, 703.10, 703.11, and 703.12 in toto, and substitute:

907-703.06--Aggregates for Hot Mix Asphalt.

907-703.06.1--General.

907-703.06.1.1--Coarse Aggregates.

Coarse aggregate, material retained on the No. 8 sieve, shall be either crushed stone, slag, or granite; shell; expanded clay; expanded shale; crushed gravel or combination thereof. Crushed reclaimed concrete pavement shall also be allowed as a coarse aggregate provided it meets the quality requirements below and the final product produced therefrom meets all other specification requirements.

The percentage of wear shall not exceed 45 when tested in accordance with AASHTO Designation: T 96.

When tested in accordance with AASHTO Designation: T 19, the dry rodded unit weight of all aggregates except expanded clay and shale shall not be less than 70 pounds per cubic foot, and crushed slag used in the surface course shall have a dry rodded unit weight of not more than 90 pounds per cubic foot except the maximum unit weight is waived for chromium slag.

The coarse aggregate shall be free of any injurious coating which will prohibit the adherence of asphalt to the aggregate particles.

The percentage of loss shall not exceed 20 when tested for soundness using magnesium sulfate in accordance with AASHTO T 104.

Shell shall consist of durable, washed particles of dead clam or dead reef oyster shell, or combination thereof. The shell shall be free of objectionable matter such as sticks, mud, clay lumps, cannery or live shell, or other deleterious matter. Not more than five percent by weight of the dredged material shall pass the No. 200 sieve; any such material shall be dispersed throughout the mass.

907-703.06.1.2--Fine Aggregates.

Fine aggregate, material passing the No. 8 sieve, shall consist of hard, durable particles of naturally disintegrated rock, or material obtained by crushing stone, slag, gravel, reclaimed concrete pavement, or combinations thereof. Fine aggregate produce from crushing reclaimed

concrete pavement shall be manufactured from material meeting the quality requirements for coarse aggregate.

Fine aggregate shall be free of lumps of clay and friable particles, loam, organic or foreign matter.

Fine aggregate produced by crushing stone, slag or gravel shall be manufactured from aggregate meeting the quality requirements of coarse aggregate.

Individual sources of fine aggregate shall be non-plastic when tested in accordance with AASHTO Designation: T 90.

Natural deposits of fine aggregate shall contain no more than 10 percent by weight passing the No. 200 sieve when tested in accordance with AASHTO Designation: T 11.

Individual fine aggregate components shall be of such consistency and dryness that a uniform and even flow from the cold feed will be provided.

Fly ash shall not be used in hot mix asphalt pavements.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-710-5

CODE: (IS)

DATE: 5/7/96

SUBJECT: Fast Drying Acrylic Waterborne Traffic Paint

Section 710, Paint, of the 1990 Edition of the Mississippi Standard Specifications for Road and Construction is hereby amended as follows:

Delete in toto Subsections 710.02.2 and 710.02.3 on pages 710-2 thru 710-8 and substitute the following:

907-710.02.2--Fast Drying Acrylic Waterborne Traffic Paint. This specification covers fast drying acrylic waterborne, ready-mixed white and yellow traffic paints, Codes FDWBTW and FDWBTY.

907-710.02.2.1--Composition of Formulation. The composition of the paint shall be left to the discretion of the manufacturer as long as the finished product is composed of 100% acrylic emulsion, Rohm and Haas Emulsion E-2706 or Dow Chemical Emulsion DT 211NA, and meets the requirements of this specification and of any applicable Federal, State or Local regulations for products of this type.

The paint shall contain no lead, chromium, cadmium or barium. The organic yellow shall be pigment yellow C.I. #75 or #65. Rutile titanium dioxide shall be used in the yellow paint, FDWBTY.

907-710.02.2.1.1--Percent Pigment. The percent pigment by weight shall be not less than 45% nor more than 55%.

907-710.02.2.1.2--Total Non-Volatile. The paint shall have not less than 73% total non-volatiles by weight.

907-710.02.2.1.3--Non-Volatile Vehicle. The non-volatile portion of the vehicle shall be composed of a 100% acrylic polymer (Rohm and Haas Emulsion E-2706 or Dow Chemical Emulsion DT 211NA) and shall not be less than 44% by weight.

907-710.02.2.1.4--Organic Matter. The volatile content of the paint shall contain less than 150 grams of volatile organic matter per liter of total non-volatile paint material.

907-710.02.2.1.5--Solids Volume. The volume of solids shall be not less than 58%.

907-710.02.2.1.6--Weight per Gallon. The paint shall weigh a minimum of 12.0 pounds/gallon and the weight of the production batches shall not vary more than ± 0.2 pounds/gallon from the weight of the qualification samples.

907-710.02.2.2--No Tracking Time. The paint shall dry to a no tracking condition under traffic in ninety (90) seconds maximum when applied at 15 ± 1 mil. wet film thickness and 110-140°F, and from three (3) to ten (10) minutes when applied at ambient temperature with six (6) pounds per gallon of Class A (Standard) glass beads or with twelve (12) pounds per gallon of Class B (High-Visibility) glass beads.

907-710.02.2.3--Viscosity. The consistency of the paint shall be not less than 75 nor more than 95 Krebs Units (KU) at 77°F when tested in accordance with Federal Test Method Standard No. 141.

907-710.02.2.4--Flexibility. The paint shall show no cracking or flaking when tested in accordance with Federal Specification TT-P-1952.

907-710.02.2.5--Dry Opacity. The minimum contrast ratio shall be 0.96 when drawn with a 0.005 Bird applicator.

907-710.02.2.6--Daylight Reflectance. The daylight directional reflectance shall not be less than 85% for white paint and not less than 54% for yellow paint (relative to magnesium oxide), when tested in accordance with Federal Test Method No. 141.

907-710.02.2.7--Abrasion Resistance. No less than 180 liters of sand shall be required for removal of the paint film when tested in accordance with Federal Specification TT-P-1952.

907-710.02.2.8--Glass Bead Adhesion. The test for bead adhesion shall be conducted in accordance with the Abrasion Resistance Test with the exception that the test be modified to require glass beads to be uniformly applied on the paint by gravity flow at the rate of 6 pounds/gallon for Class A (Standard) beads and 12 pounds/gallon for Class B (High-Visibility) beads. No less than 550 liters of sand shall be required for the removal of the beaded film. The application of the glass beads is to be a separate operation, but applied at the same time as the paint.

907-710.02.2.9--Bleeding. The paint shall have a minimum bleeding ratio of 0.97 when tested in accordance with Federal Specification TT-P-1952. The asphalt saturated felt shall conform to Federal Specification HH-R-590.

907-710.02.2.10--Scrub Resistance. The paint shall pass 300 cycles minimum when tested in accordance with ASTM Designation: D 2486.

907-710.02.2.11--Freeze-thaw-Stability. The paint shall show no coagulation or change in consistency greater than 5 Krebs Units, or a decrease in scrub resistance of greater than 10% when tested in accordance with Federal Specification TT-P-1952.

907-710.02.2.12--Dilution Test. The paint shall be capable of dilution with water at all levels without curdling or precipitation such that the wet paint can be readily cleaned up with water only.

907-710.02.2.13--Storage Stability. After 30 days storage in a three-quarters filled, closed container, the paint shall show no caking that cannot be readily remixed to a smooth, homogeneous state, no skinning, livering, curdling, or hard settling. The viscosity shall not change more than 5 Krebs Units from the viscosity of the original sample.

907-710.02.3.14--Acceptance Procedure. The traffic paint must be obtained from a manufacturer on the Department's "List of Approved Traffic Paint Manufacturers". Acceptance will be based on results of tests performed by MDOT Central Laboratory on random samples obtained from delivered batches. Certification, sampling and acceptance shall be in accordance with the requirements of MDOT S.O.P. No. TMD-30-01-00-000.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-712-5

CODE: (IS)

DATE: 05/01/2002

SUBJECT: Materials for Guardrail Posts

Section 712, Fence and Guardrail, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction, is hereby amended as follows:

907-712.06--Guard and Guardrail Posts.

Delete Subsection 712.06.4 on Page 712-6, and substitute the following:

907-712.06.4--Steel Posts. Steel posts shall be of the section and length as shown on the plans and shall conform to the requirements of ASTM Designation: A 36.

907-712.06.5--Treated Wood Blocks For Use With Metal Guardrail Posts. Treated wood blocks for use with metal guardrail posts shall be within $\pm 3/8$ -inch of the size and dimensions shown on the plans, except that a minus tolerance shall not be allowed for the slotted width in which the metal post must fit. Preservative treatment shall be in accordance with AWWA Standard C14.

The blocks must be obtained from approved manufacturers listed on MDOT's "List of Approved Suppliers of Treated Wood Products". The manufacturer's approval will be based on their Quality Control Program for material certification. The manufacturer shall employ a certified material grader and treatment inspector who will be responsible for grading and inspecting the treated material. The inspector's certification shall be from an approved industrial organization such as AWWA, SPIB or American Lumber Standard. The manufacturer's certification shall be based on satisfactory grading, dimensional measurements, and treatment results. The manufacturer shall provide the Contractor two copies of their material certification and treatment report for each charge of material delivered. Also, a copy of these documents shall be mailed to the State Materials Engineer for all blocks shipped for use on MDOT projects.

The manufacturer shall brand each block with the following information:

- (1) manufacturer's logo or initials (XYZ)
- (2) manufacturer's plant location
- (3) species of wood (SYP)
- (4) treatment type (CCA-C)
- (5) minimum preservative retention by assay (0.60)

The Contractor, prior to installation of the blocks, shall furnish a copy of the manufacturer's certification and treatment report covering the blocks to be installed to the Department's representative.

The Project Engineer, or the Project Engineer's designated representative, will inspect each block prior to installation for proper dimensions, identification and damage or other deficiency prior to permitting installation of the blocks. The Project Engineer will notify the

State Materials Engineer when blocks are delivered to the project and report any deficiencies found. The State Materials Engineer will, at the State Materials Engineer's discretion, dispatch an inspector to the project for inspecting and boring the blocks for an assay test. Final acceptance of the blocks will be based on satisfactory field inspection and satisfactory test results when field sampling is performed.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-714-6

CODE: (IS)

DATE: 10/31/97

SUBJECT: Miscellaneous Materials

Section 714, Miscellaneous Materials, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

After the fifth line of Subsection 714.05.2 on page 714-4, add the following:

The available alkalis, as Na_2O , not to exceed 1.5 percent.

Delete in toto Subsection 714.06 on page no. 714-4 and substitute:

907-714.06--Ground Granulated Blast Furnace Slag (GGBFS).

907-714.06.1--General. GGBFS shall be obtained from an approved source. The acceptance of GGBFS shall be based on certified test reports, certification of shipment from the supplier and tests performed on samples obtained after delivery in accordance with the Department's Standard Operating Procedures.

The Contractor shall provide suitable means for storing and protecting the GGBFS against dampness and contamination. Separate storage silos, bins or containers shall be provided for GGBFS. GGBFS which has become partially set, caked or contains lumps shall not be used.

The Engineer shall be notified in writing of the nature, amount and identity of any processing or other additions made to the GGBFS during production.

GGBFS from different mills shall not be mixed or used alternately in any one class of construction or structure without written permission from the Engineer; except that this requirement will not be applicable to cement treatment of design soils, subbases or bases.

In addition to these requirements, GGBFS shall meet the following specific requirements.

907-714.06.2--Specific Requirements. GGBFS shall meet the requirements of AASHTO Designation: M 302, Grade 120. GGBFS shall contain no chlorides.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| SPECIAL PROVISION NO. 907-714-10

CODE: (IS)

| DATE: 12/11/2003

SUBJECT: Geotextiles

Section 714, Miscellaneous Materials, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete in toto Subsection 714.13 beginning on page 714-15 and substitute the following:

907-714.13--Geotextiles.

| **907-714.13.1--General.** Unless specified otherwise, the geotextile may be woven or non-woven. The fibers used in the manufacture of the geotextiles and the threads used in joining geotextiles by sewing, shall consist of long-chain synthetic polymers, composed of at least 95% by weight polyolefins, polyesters, or polyamides. They shall be formed into a network such that the filaments or yarns retain dimensional stability relative to each other, including selvages. The geotextile shall be mildew resistant and inert to biological degradation and naturally encountered chemicals, alkalines and acids. Geotextile which is not protected from sunlight after installation shall contain stabilizers and/or inhibitors to make it resistant to deterioration from direct sunlight, ultraviolet rays, and heat.

| The edges of the geotextile shall be selvaged or finished in such a manner to prevent the outer yarn of filaments from raveling. The geotextile shall be free of defects or flaws, which affect the required physical properties.

| Geotextile for silt fence shall be manufactured in widths of not less than three feet, and geotextile for other applications shall be manufactured in widths of not less than six feet. Sheets of geotextile may be sewn or bonded together at the factory or other approved locations, but deviation from the physical requirements will not be permitted.

| Acceptance testing, except geotextile for silt fence, will be conducted with geotextile samples from each lot shipped to the project, as per Subsection 907-714.13.10.

| **907-714.13.2--Geotextile for Silt Fence.** The geotextile shall conform to the physical requirements of Type I or II as shown in Table I. Unless a specific type is specified in the plans or contract documents, the Contractor may select Type I or II.

907-714.13.2.1--Woven Wire Backing. Except as provided herein, silt fence shall be reinforced with a woven wire backing. The wire backing shall be at least 32 inches high and have no less than six horizontal wires. Vertical wires shall be spaced no more than 12 inches apart. The top and bottom wire shall be 10 gage or larger. All other wire shall be no smaller than 12½ gage.

907-714.13.2.2--Posts. Wood or steel posts may be used. Wood posts shall have a minimum diameter of three inches and length of five feet and shall be straight enough to provide a fence without noticeable misalignment. Steel tee posts shall be five feet long, approximately 1 3/8 inches wide, 1 3/8 inches deep, and 1/8 inch thick with a nominal weight of 1.33 pounds per foot prior to fabrication. The posts shall have projections, notches or holes for fastening the wire backing or [geotextile](#) to the posts.

907-714.13.2.3--Staples. Staples shall be made of nine gage wire with a minimum length of one inch after bending.

907-714.13.3--Geotextile for Subsurface Drainage. Unless otherwise specified, the [geotextile](#) shall conform to the physical requirements of Type III as shown in Table I.

907-714.13.3.1--Geotextile for Edge Drains. The [geotextile](#) shall conform to the physical requirements of Type V as shown in Table I, except the AOS for the woven [geotextile](#) shall have a range of 0.15 mm to 0.43 mm.

907-714.13.4--Geotextile Underseal. The [geotextile](#) shall be non-woven polyester or polypropylene, which is satisfactory for use with asphalt cements. Unless otherwise specified, the [geotextile](#) shall conform to the physical requirements of Type IV in Table I.

907-714.13.5--Geotextile for Use Under Riprap. Unless otherwise specified, the [geotextile](#) shall conform to the physical requirements of Type V in Table I. The requirements for grab tensile, puncture, and trapezoidal tear strengths may be reduced 50 percent when the [geotextile](#) is cushioned from rock placement by a 6-inch minimum layer of sand.

907-714.13.6--Geotextile Stabilization. The [geotextile](#) shall meet the physical requirements as shown in Table I for the Type specified in the plans or contract documents.

907-714.13.7--Securing Pins. Steel pins used for anchoring the [geotextile](#) shall be three-sixteenth inch (3/16") in diameter, minimum length of 15 inches, pointed at one end and fabricated with a head for retaining a steel washer. A minimum one and one-half inch (1½") washer shall be installed on each pin.

907-714.13.8--Identification. Each roll of [geotextile](#) or container shall be visibly labeled with the name of the manufacturer, type of [geotextile](#) or trade name, lot number, and quantity of material.

907-714.13.9--Shipment and Storage. During shipment and storage, the [geotextile](#) shall be protected from direct sunlight, ultraviolet rays, temperatures greater than 140°F, mud, dirt, dust, and debris. The [geotextile](#) shall be wrapped and maintained in a heavy-duty protective covering, including ends of roll.

907-714.13.10—Certification, Acceptance Sampling and Testing. The Contractor shall furnish to the Engineer three copies of the manufacturer's certification that each lot in a shipment complies with the requirements of the contract. [Certification of geotextile for silt fence shall](#)

include a material conformance statement, as per Subsection 700.05.1, that the geotextile meets or exceeds the minimum average roll values specified in Table 1. All fabric, steel pins, washers, fence posts, woven wire and wire staples are subject to approval by the Engineer upon delivery to the work site.

Acceptance testing shall be completed prior to incorporating in the work. Acceptance of geotextile to be used in the work, except geotextile for silt fence, will be based on the results of tests performed by the Department on verification samples submitted from the project. The Engineer will select one roll at random, from each lot in a shipment, for sampling. A sample extending full width of the randomly selected roll and containing at least five square yards of geotextile will be obtained and submitted by the Engineer. The sample shall be provided at no additional cost to the State.

TABLE I
GEOTEXTILES

Type Designation	I ^a	II ^a	III	IV	V	VI		VII		
Application	Sediment Control		Drainage	Paving	Separation & Drainage	Separation, Stabilization & Reinforcement				
Physical Properties										Test Method
Grab Strength (lbs.)	50	90	110	90	200	W 280	NW 180	W 450	NW 280	ASTM D 4632
Elongation %	----	50% max @ 45 lbs.	20% min	50% min @ break	50% min	50% max	50% min	50% max	50% min	ASTM D 4632
Seam Strength (lbs.)	----	----	70	----	180	240	160	400	240	ASTM D 4632
Puncture Strength (lbs.)	----	----	40	----	80	110	75	180	115	ASTM D 4883
Trapezoidal Tear (lbs.)	----	----	40	----	80	100	70	150	100	ASTM D 4533
Asphalt Retention (gal/yd ²)	----	----	----	0.2	----	----	----	----	----	ASTM D 6140
Permittivity (Sec ⁻¹)	0.05	0.05	0.5	----	0.15	0.2	0.2	0.2	0.2	ASTM D 4491
AOS Woven (mm)	0.15 - 0.84	0.15 - 0.84	0.15 - 0.43	----	0.21 - 0.43	0.15 - 0.21	----	0.15 - 0.21	----	ASTM D 4751
AOS Non-Woven (mm)	<0.84	<0.84	<0.43	----	<0.43	----	<0.43	----	<0.43	ASTM D 4751
Tensile Strength after UV (% Retained)	70@500Hr.	70 @ 500 Hr.	70 @ 150 Hr.	----	70 @ 150 Hr.	70 @ 150 Hr.		70 @ 150 Hr.		ASTM D 4355
Melting Point (°F)	----	----	----	325°F	----	----		----		ASTM D 276

^a: All property values, with the exception of apparent opening size (AOS), represent minimum average roll values in the weakest principal direction. Values for AOS represent the maximum average roll values.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-715-4

CODE: (IS)

DATE: 9/29/2000

SUBJECT: Agricultural Limestone

Section 715, Roadside Development Materials, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete the first sentence of Subsection 715.02.2 on page 715-1 and substitute the following:

Combination or manufactured fertilizer shall be "standard commercial products" and shall contain not less than the percentages by weight of the ingredients set out in Table A, except for agricultural limestone which shall meet the requirements of Subsection 907-715-.02.2.1.

In Table A of Subsection 715.02.2 on page 715-2, delete the column titled "Agricultural Limestone" and the row titled "Calcium and Magnesium Carbonate**".

Delete the third paragraph on page 715-3.

At the end of Subsection 715.02.2 on page 715-3, add the following:

907-715-02.2.1--Agricultural Limestone. Agricultural limestone shall be either a Grade "A" liming material, or a marl or chalk agricultural liming material as addressed in the latest Mississippi Agricultural Liming Material Act of 1993, published by the Mississippi Department of Agriculture and Commerce.

907-715-02.2.1.1--Screening Requirements. Grade "A" liming material, including ground shells, shall not have less than 90% of the material passing the No. 10 sieve, and not less than 50% passing the No. 60 sieve. Marl or chalk liming material shall not have less than 90% of the material passing the No. 10 sieve.

907-715-02.2.1.2--Neutralizing Values. Grade "A" liming material shall not have less than 90% calcium and magnesium carbonate calculated as calcium carbonate equivalent when expressed on a dry weigh basis. Marl or chalk liming material shall not have less than 70% calcium and magnesium carbonate calculated as calcium carbonate equivalent when expressed on a dry weigh basis.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-716-1

CODE: (IS)

DATE: 05/16/2002

SUBJECT: Miscellaneous Materials

Section 716, Miscellaneous Metals, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete Subsection 716.04 on page 716-1 and substitute the following:

907-716.04--Gray Iron Casings. Gray iron castings shall conform to AASHTO Designation: M 105. Class 30B shall be furnished unless otherwise specified. For testing purposes a lot size shall be defined as the lesser of either a total of 35,000 pounds or one week's production for the Department. The test bars shall be made from a melt of iron used in production of units for the Department. The test bar length shall be a minimum of 16 inches.

907-716.07--Copper Bearings and Sheet Copper.

Delete Subsection 716.07.1 on page 716-1 and substitute the following:

907-716.07.1--Rolled Copper-Alloy Bearings and Expansion Plates. Rolled copper-alloy bearings and expansion plates shall conform to ASTM Designation: B 100. Alloy UNS No. C51000 shall be furnished unless otherwise specified.

Delete Subsections 716.10 on page 716-2 and substitute the following:

907-716.10--Lead Plates, Pipes, Etc. Lead used for plates, pipes, etc. shall conform to ASTM Designation: B 29, Grade: Pure Lead.

907-716.14--Bar Grates.

Delete Subsection 716.14.1 on page 716-3 and substitute the following:

907-716.14.1--Material Requirements. Plain round steel bars and strap bars shall conform to the following requirements:

B-9 Grates and Bar Grates:	AASHTO Designation M 270, Grade 36.
MI, GI, & SS-3 Grates:	AASHTO Designation: M270, Grade 50W, or as specified in the plans.

Delete the last paragraph of Subsection 716.14.2 on page 716-3 and substitute the following:

After fabrication, the bar grate shall be coated with an approved commercial quality coating designed for coating steel castings and fabricated units. The State Materials Engineer shall approve the coating material prior to application.

MISSISSIPPI STATE HIGHWAY DEPARTMENT

SPECIAL PROVISION NO. 907-720-3

CODE: (IS)

DATE: 1/13/92

SUBJECT: Performed Pavement Markings for Construction Zones

Section 720, Pavement Marking Materials, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-720.05.2.2--Type 2.

Delete lines 8 thru 18 on page no. 720-13 and substitute:

Removability. The markings shall be removable from asphalt and portland cement concrete pavement, either manually or with a roll-up device, at temperatures above 40°F. with the use of a small amount of controlled heat that does not damage the pavement. The manufacturer shall be able to show that the markings have met this requirement after the following minimum traffic exposure based on transverse test decks with rolling traffic:

Time in place -----	365 days
ADT per lane -----	9,000 (28% Trucks)
Minimum axle hits -----	10,000,000

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-720-11

CODE: (IS)

DATE: 9/27/99

SUBJECT: Glass Beads

Section 720, Pavement Marking Materials, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete in toto Subsection 720.01 on page 720-1 and substitute the following:

907-720.01--Glass Beads. The beads shall be transparent, clean, colorless glass, smooth and spherically shaped, free from milkiness, pits, or excessive air bubbles and conform to the specific requirements for the class designated. Unless otherwise specified, Class A (Standard) glass beads shall be furnished.

907-720.01.1--Class A (Standard). The beads shall be Type 1, non-flotation with a moisture resistant coating conforming to the requirements of AASHTO Designation: M 247.

907-720.01.2--Class B (High-Visibility). The beads shall be non-flotation, embedment coated and conform to the following specific requirements.

907-720.01.2.1--Gradation. The beads shall meet the gradation requirements of Table 1.

TABLE 1

<u>U.S. STANDARD SIEVE NO</u>	<u>% RETAINED</u>
12	0
14	0-5
16	5-20
18	40-80
20	10-40
25	0-5
Pan	0-2

907-720.01.2.2--Roundness. The beads shall have a minimum of 80 percent rounds per screen for the two (2) highest sieve quantities. The remaining sieve fractions shall be no less than 75 percent rounds.

907-720.01.2.3--Angular Particles. The beads shall have no more than three (3) percent angular particles per screen.

907-720.01.2.4--Refractive Index. The beads shall have a refractive index of 1.50 to 1.52.

907-720.01.3--Packaging and Marking. The beads shall be packaged in 50 or 55-pound moisture proofed bags. Each bag shall be stamped with the following information: name and address of manufacturer, shipping point, trademark or name, the wording "glass beads", class, weight, lot number and the month and year of manufacture.

907-720.01.4--Acceptance Procedures. The manufacturer shall furnish the MDOT Central Laboratory three copies of the certified test report(s) showing results of all required tests and certification that the material meets the specifications. Acceptance sampling and testing of glass beads will be in accordance with MDOT S.O.P. No. TMD-40-02-00-000.

907-720.02--Thermoplastic Pavement Markings. Delete the second paragraph of Subsection 720.02 on page 720-1 and substitute the following:

Additional beads by the drop-on method shall be applied at a rate of not less than three pounds of beads per 100 feet of six-inch stripe.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. **907-720-12**

CODE: (IS)

DATE: **7/07/2000**

SUBJECT: **Reflective Pavement Markers and Adhesive for Pavement Markers**

Section 720, Pavement Marking Materials, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-720.03--Raised Pavement Markers.

Delete in toto Subsection 720.03.1 on page 720-1 and substitute:

907-720.03.1--General. Raised pavement markers, including high performance raised pavement markers, shall be listed on the Department's "Approved Sources of Materials".

907-720.03.2--Type of Markers. At the end of Subsection 720.03.2 on page 720-2 add the following:

High performance raised pavement markers shall be available in Types B through G.

Delete in toto Subsection 720.03.3 on page 720-2 and substitute:

907-720.03.3--Acceptance Procedures.

907-720.03.3.1--Marker Type A. The Contractor shall furnish the Engineer three copies of the manufacturer's certified test reports covering all pavement markers shipped to the project. The certified test report shall show the test results on each part of **each section contained in** Mississippi Test Method MT-17 and shall state that the markers represented by the test results **comply with the specifications contained herein in all respects.**

The pavement markers will be tentatively accepted on the basis of the manufacturer's certified test reports. **Final acceptance shall be based on check samples as set out in 720.03.4.**

907-720.03.3.2--Marker Type B through G. The Contractor shall furnish the Engineer three copies of the manufacturer's certification covering all pavement markers shipped to the project. The certification shall state that the raised pavement markers meet the applicable requirements of ASTM Designation: D 4280.

The pavement markers will be tentatively accepted on the basis of the manufacturer's certification. The Department reserves the right to obtain check samples as deemed necessary for determining compliance with this specification.

907-720.03.3.3--Marker Type H and I. Prior to use, the Contractor shall furnish the Engineer three copies of a certification for each shipment stating that the material furnished is of the same composition as that originally approved by the Department and that the material has not been changed or altered in any way. The Department will obtain check samples as deemed necessary for determining compliance with this specification.

Delete in toto Subsection 720.03.4.1 on page 720-2 and substitute:

907-720.03.4.1--Sampling. For Marker Type A, H and I, ten (10) markers of each type and class, selected at random, will constitute a representative sample for each lot regardless of lot size.

For Marker Type B through G, check sampling, when performed, shall require ten (10) markers of each type, selected at random, to constitute a representative sample for each lot regardless of lot size.

A resample of any marker type will consist of twice as many markers as originally sampled.

Delete Subsection 720.03.4.2 on pages 720-2 & 720-3 and substitute the following:

907-720.03.4.2--Tolerances.

907-720.03.4.2.1--Tolerances For Marker Type A, H & I. At least 90% of the original sampling of each lot of markers shall pass all tests with the following exceptions:

When less than 90% but more than 70% pass all tests, a resample of that lot will be allowed at the request of the Contractor. When less than 70% of the markers from the original sample comply with the requirements, the lot represented by the samples will be rejected and no resample will be allowed. Tolerances for resamples shall be in the same ratio as specified above.

At least two of three specimens, randomly selected for strength, water absorption, and autoclave, and also the averages of the three, must pass the stated requirements; otherwise, three additional markers selected at random shall be tested, and if the same conditions for passing are not met for these latter three markers, the lot will be rejected.

907-720.03.4.2.2--Tolerances For Marker Type B through G. At least 90% of the check sampling of each lot of markers shall pass the strength test required in the Physical Properties Section of ASTM Designation: D 4280 with the following exceptions:

When less than 90% but more than 70% pass the test, a resample of that lot will be allowed at the request of the Contractor. When less than 70% of the markers from the check sample comply with the requirements, the lot represented by the samples will be rejected and no resample will be allowed. Tolerances for resamples shall be in the same ratio as specified above.

Delete in toto Subsection 720.03.6 on pages 720-4 & 720-5 and substitute the following:

907-720.03.6--Reflective Pavement Markers. Reflective pavement markers shall be listed on the Department's "Approved Sources of Materials" and shall meet the applicable requirements of ASTM Designation: D 4280.

907-720.03.7--Adhesive for Pavement Markers.

907-720.03.7.6--Bituminous Adhesive (Standard Type).

Under paragraph (c) on page 720-6 for filler properties, change the minimum percent passing the No. 200 sieve from 95 to 90.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-721-5

CODE: (SP)

DATE: 1/09/2001

SUBJECT: Flexible Delineators

Section 721, Materials for Signing, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete in toto Subsection 721.07.1 beginning on page 721-12 and substitute the following:

907-721.07.1--Flexible Posts. Flexible posts for delineators shall be composed of high impact fiberglass reinforced composite, engineering blended plastic or thermosetting polymers which is reasonably unaffected by long term U.V. exposure.

Flexible posts for delineators must be one from the Department's "Approved Sources of Materials". Prior to use, the Contractor shall furnish the Engineer three copies of the manufacturer's certification for each shipment stating that the material furnished is of the same composition as that originally approved by the Department and that the material has not been changed or altered in any way.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-721-7

CODE: (IS)

DATE: 01/18/2002

SUBJECT: Reflective Sheeting

Section 721, Materials for Signing, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete in toto Subsection 721.06 beginning on page 721-4 and ending on page 721-12, and substitute the following:

907-721.06--Reflective Sheeting.

907-721.06.1--General. Retroreflective sheeting materials shall comply with all applicable requirements of ASTM Designation: D 4956, except as specifically modified herein, and must be listed on the Department's "Approved Sources of Materials".

Reflective sheeting shall be one of the following types.

Type III A high-intensity retroreflective sheeting. This shall be an encapsulated glass-bead or unmetallized microprismatic retroreflective material. This sheeting shall have a protected, pre-coated, pressure-sensitive adhesive backing.

Type VII A super high-intensity retroreflective sheeting. This shall be an unmetallized microprismatic retroreflective material. This sheeting shall have a protected, pre-coated, pressure sensitive adhesive backing.

Type VIII A super high-intensity retroreflective sheeting. This shall be an unmetallized microprismatic retroreflective material. This sheeting shall have a protected, pre-coated, pressure sensitive adhesive backing.

Type IX A very-high intensity retroreflective sheeting. This shall be an unmetallized, microprismatic retroreflective material. This sheeting shall have a protected, pre-coated, pressure sensitive, adhesive backing.

All other retroreflective sheeting shall be as shown in the plans.

907-721.06.2--Performance Requirements. The retroreflective sheeting shall have the following minimum brightness values at 0.2° and 0.5° observation angle (in addition 1.0° for Type IX sheeting) expressed as average candelas per footcandle per square foot of material.

Sheetings and inks processed and applied in accordance with the manufacturer's recommendations, shall perform effectively for the number of years stated below. The sheeting will be considered unsatisfactory if it has deteriorated due to natural causes to the extent that: (1) the sign is ineffective for its intended purpose when viewed from a moving vehicle under normal day and night driving conditions or (2) the coefficient of retroreflection

is less than the minimum specified for that sheeting during the periods listed below. For screen printed transparent colored areas on white sheeting, the coefficients of retroreflection shall not be less than 70% of the values for the corresponding color in the table.

<u>Type III Sheeting</u>	Retain 85% of initial values listed in Table 1 through 7 years Retain 80% of initial values listed in Table 1 between 7 & 10 years
<u>Type VII Sheeting</u>	Retain 85% of initial values listed in Table 2 through 7 years Retain 80% of initial values listed in Table 2 between 7 & 10 years Retain 50% of initial values listed in Table 2 through 3 years (Fluorescent Orange)
<u>Type VIII Sheeting</u>	Retain 85% of initial values listed in Table 3 through 7 years Retain 80% of initial values listed in Table 3 between 7 & 10 years Retain 50% of initial values listed in Table 3 through 3 years (Fluorescent Orange) Retain 80% of initial values listed in Table 3 through 7 years (Fluorescent Yellow/Green) (Fluorescent Yellow)
<u>Type IX Sheeting</u>	Retain 85% of initial values listed in Table 4 through 7 years Retain 80% of initial values listed in Table 4 between 7 & 10 years Retain 80% of initial values listed in Table 4 for 7 years (Fluorescent Yellow/Green)(Fluorescent Yellow)

MINIMUM COEFFICIENTS OF RETROREFLECTION

(Candela per foot candle per square foot) - cd/ft²

(Per ASTM E 810)

TABLE 1
Type III Sheeting

Observation Angle	Entrance Angle	White	Yellow	Orange	Green	Red	Blue	Brown
0.2°	-4°	250	170	100	45	45	20	12
0.2°	+30°	150	100	60	25	25	11	8.5
0.5°	-4°	95	62	30	15	15	7.5	5.0
0.5°	+30°	65	45	25	10	10	5.0	3.5

TABLE 2
Type VII Sheeting

Observation Angle	Entrance Angle	White	Yellow	Green	Red	Blue	Brown	Fluorescent Orange
0.2°	-4°	750	560	75	150	34	23	200
0.2°	+30°	430	320	43	86	20	10	85
0.5°	-4°	240	180	24	48	11	8	90
0.5°	+30°	135	100	14	27	6.0	4	50

TABLE 3
Type VIII Sheeting

Observation Angle	Entrance Angle	White	Yellow	Green	Red	Blue	Brown	Fluorescent Orange	Fluorescent Yellow/ Green	Fluorescent Yellow
0.2°	-4°	700	525	70	105	42	21	200	480	375
0.2°	+30°	325	245	33	49	20	10	85	240	170
0.5°	-4°	250	190	25	38	15	7.5	90	235	165
0.5°	+30°	115	86	12	17	7	3.5	50	110	85

TABLE 4
Type IX Sheeting

Observation Angle	Entrance Angle	White	Yellow	Green	Red	Blue	Fluorescent Yellow/ Green	Fluorescent Yellow
0.2°	-4.0°	380	285	38	76	17	325	240
0.2°	+30.0°	215	162	22	43	10	205	150
0.5°	-4.0°	240	180	24	48	11	240	165
0.5°	+30.0°	135	100	14	27	6.0	110	75
1.0°	-4.0°	80	60	8	16	3.6	65	45
1.0°	+30.0°	45	34	4.5	9	2.0	35	25

907-721.06.3--Certification. The Contractor shall require the supplier to furnish certified evidence and/or samples to the Engineer showing conformance to these requirements. Manufacturer's warranties or guarantees provided as customary trade practice shall be furnished the Department.

907-721.06.4--Color. Reflective sheeting shall meet the color requirements of ASTM Designation: D 4956. See Table 5 below for color specifications for fluorescent yellow green, fluorescent orange, and fluorescent yellow sheeting.

TABLE 5
Color Specification Limits for New Sheeting (Daytime)

Color	Chromaticity Coordinate	Chromaticity Coordinate	Chromaticity Coordinate	Chromaticity Coordinate	Total Luminance
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	Factor Limit
	<u>x</u> <u>y</u>	<u>x</u> <u>y</u>	<u>x</u> <u>y</u>	<u>x</u> <u>y</u>	<u>Y?</u> <u>Min.</u>
Fluorescent Yellow Green	0.387 0.610	0.460 0.540	0.438 0.508	0.376 0.568	60%
Fluorescent Orange	0.562 0.350	0.645 0.355	0.570 0.429	0.506 0.404	30%
Fluorescent Yellow	0.521 0.424	0.557 0.442	0.479 0.520	0.454 0.491	40%

907-721.06.5--Adhesive. The retroreflective sheeting shall include a pre-coated pressure sensitive adhesive (ASTM Designation: D 4956, Class I) applied without the necessity of additional adhesive coats on the retroreflective sheeting or application surface.

The Class I adhesive shall be a pressure sensitive adhesive of the aggressive tack type requiring no heat solvent or other preparation for adhesion to smooth clean surfaces.

The protective liner attached to the adhesive shall be removed by peeling without soaking in water or other solutions and shall be easily removed after accelerated storage for four hours at 160° F under a weight of 2.5 pounds per square inch.

907-721.06.6--Additional Contract Requirements. In addition to the above requirements, the following requirements are applicable only when the sheeting material is being purchased for use in the MDOT Sign Shop.

907-721.06.6.1--Sheeting Manufacturer's Replacement Obligation. Where it can be shown that retroreflective traffic signs with Type III, Type VII, Type VIII, or Type IX sheeting supplied and used according to the sheeting manufacturer's recommendations have not met the performance requirements, the sheeting manufacturer shall replace the sheeting required to restore the sign surface to its original effectiveness during the entire 10 years. In addition, during the first seven (7) years the manufacturer of Type III, Type VII, Type VIII, or Type IX sheeting shall cover the cost of restoring the sign surface to its original effectiveness at no cost to the Department for materials and labor for both sign manufacture and installation.

907-721.06.6.2--Technical Assistance Requirements.

Instruction and Training. The manufacturer supplying the retroreflective sheeting shall provide at no additional cost the services of a qualified technician for instruction and training at the sign manufacturing facility. This instruction shall be provided bi-annually or when requested, and shall include but not be limited to training films, material application, equipment operation, silk screening techniques, packaging, storage, and other proven sign shop practices as they apply to the retroreflective sheeting supplied by the manufacturer, and to assure that the resulting signs can comply with the applicable specifications.

Technical Service. The sheeting manufacturer shall, without additional cost to the Department, provide the sign shop with competent technical service and product information including service on screen printing problems with the inks furnished by the manufacturer.

Equipment. The manufacturer supplying the retroreflective sheeting shall provide technical assistance for the recommended sheeting application equipment and certify that trained personnel shall be available on 72 hours notice to render such service necessary to adjust ink consistency or otherwise modify the application of silk screen equipment to accommodate use of manufacturer's sheeting. "Service" is understood to mean the capability of calibration and trouble shooting, as well as the training and retaining of personnel as required.

907-721.06.6.3--Warranty. Any warranties prepared by the manufacturer shall be included with the bid documents.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-721-8

CODE: (IS)

DATE: 05/01/2002

SUBJECT: Materials for Signing

Section 721, Materials for Signing, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-721.02--Ferrous Materials

Delete the sixth paragraph of Subsection 721.02.2.1 on page 721-1 and substitute the following:

Structural steel shapes, bars, and plates used for bracing, framing and other accessories, including base plates for steel posts, per ASTM Designation: A 36.

Delete the fourth paragraph of Subsection 721.02.2.2 on page 721-2 and substitute the following:

Structural shapes, plates, and bars per ASTM Designation: A 36.

Delete the first paragraph of Subsection 721.02.5 beginning on page 721-2 and substitute the following:

907-721.02.5--Bolts, Nuts, Washers, Screws, and other Hardware. Except as otherwise specified, all bolts, nuts, washers, sheet metal screws, and machine screws shall be coated by the zinc chromate process. The zinc chromate process shall be in accordance with the requirements of ASTM Designation: B633. Bolts shall have a 1/2 inch head and shall meet the requirements of ASTM Designation: A307, Grade A. Nuts shall be self-locking and shall meet the requirements of ASTM Designation: A563. Flat washers shall be installed between the sign support and the self-locking nut and shall meet the requirements of ANSI Designation: B27.2. Sheet metal screws shall meet the requirements of ANSI Designation: B18.6.4. Machine screws shall meet the requirements of ANSI Designation: B18.6.3. Vinyl spacers shall be installed between the bolt head and the sign face and shall meet the following maximum dimensions: 7/8 inch outside diameter by 3/8 inch inside diameter by 1/16 inch thickness.

At the end of Subsection 721 on page 721-13, add the following:

907-721.10--Direct Applied Copy. Direct applied copy which is to be provided on guide directional signs, ground mounted or overhead, shall be directly applied to the sign face. Direct applied copy shall include letters, numerals, symbols and borders. The designs for capital and lower case shall be as required by the plans. All type of copy other than caps and lower case shall be as required by the plans. All type faces (fonts) shall conform to the recommendations contained in standards published by the Federal Highway Administration. All direct applied copy shall be attached to the sign face by means of pressure sensitive adhesive meeting the requirements of Subsection 721.06.5--Adhesive. Direct applied copy shall consist of encapsulated lens silver retroreflective sheeting meeting the requirements of Subsection 721.06--Reflective Sheeting.

All signs shall be delivered to the site of their erection in one piece with all bolts, rivets, moldings, extrusions, copy, and other required appurtenances thereto attached, complete and

ready to be mounted to the sign support structure. Any required supplemental (temporary) supports required for stability during transport shall be firmly attached but easily removed prior to erection.

SPECIAL PROVISION NO. 906-3

Training Special Provisions

This Training Special Provision supersedes subparagraph 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," (Attachment 1), and is in implementation of 23 U.S.C. 140(a).

As part of the Contractor's equal employment opportunity affirmative action program training shall be provided as follows:

The Contractor shall provide on-the-job training aimed at developing full journeymen in the type of trade or job classification involved.

The number of trainees to be trained under this special provision will be as indicated in the bid schedule of the contract.

In the event that a Contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided, however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also insure that this training special provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. Prior to commencing construction, the Contractor shall submit to the State highway agency for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeymen status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a

journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the State highway agency and the Federal Highway Administration. The State highway agency and the Federal Highway Administration shall approve a program if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the division office. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the engineer, reimbursement will be made for training persons in excess of the number specified herein. This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the Contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirements of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program. It is not required that all trainees be on board for the entire length of the contract. A

Contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The Contractor shall furnish the trainee a copy of the program he will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily completed.

The Contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

SPECIAL PROVISION NO. 906-4

2000 MISSISSIPPI DEPARTMENT OF TRANSPORTATION ON-THE-JOB TRAINING PROGRAM

ALTERNATE TRAINING SPECIAL PROVISION

PURPOSE

The purpose of the On-The-Job Training (OJT) Program is to provide training for minority, female and economically disadvantaged individuals in order that they may develop marketable skills and gain journey status in the skilled craft classifications in which they are being trained.

INTRODUCTION

The Year 2000 OJT Program has been developed through the partnering efforts of the Road Builders of Mississippi, the Federal Highway Administration (FHWA) and the Mississippi Department of Transportation (MDOT).

The OJT Program has been designed for use by participating contractors and subcontractors in meeting their training needs. The objective of the OJT Program is to develop skilled workers in the skilled craft trade areas of highway construction who are sufficiently trained to be productive employees in the highway construction industry work force.

The success of the OJT Program will require that contractors and subcontractors follow uniform and basic procedures in training in keeping records of trainees' progress toward journey status, and in reporting trainees' successful completion or termination from the program.

FUNDING

MDOT will establish an annual OJT Fund in which, contractors and subcontractors may bill the Department directly for hours worked by trainees. The funding source of this money will be state and federal funds for MDOT's OJT Program, with a cap of \$50,000.00.

PROCEDURE

Trainee positions will be selected by prime and sub contractors and will not be project specific. Provided below are some of the factors that will be used to establish the number of trainee positions each contracting year, they are:

- number of contracts let during a contracting year
- dollar volume
- type of project
- location
- available trainees
- training program(s) submitted by contractor

Each contractor will submit a yearly certification with regard to their participation in the OJT Program. This certification will also identify the number of trainees each prime or sub contractor intends to train on either federal or state funded highway projects.

DISBURSEMENT OF FUNDS

Contractors will be paid \$3.00 rate for each hour of training performed by all trainees in an approved training program. Program reimbursements will be made directly to the prime or sub contractor. Request for payment will be submitted to the Contract Administration Office for approval.

Contractors must complete the form providing the following information to be reimbursed.

Contractor's Name _____
Mailing Address _____

Trainee Name _____

Social Security Number _____

Type of Program _____

Total Number of Training Hours Required _____

Training Hours Completed for Reimbursement _____

Type of Statement: Monthly _____ Quarterly _____ Annual _____

Work Period or Time Frame	Project Number	Total Hours Worked By Project	Cumulative Hours in Program	Number of Hours to be paid on this Voucher

I hereby certify that this information is true... (Must have customary certification of information).

Signed by: _____ Date: _____

TRAINING PROGRAM APPROVAL

A. To use the OJT Program on highway construction projects, the contractor will notify the Department Contract Administration Office using the Request for On-the-Job Training Program Approval. The notification must include the following information:

- Trainee Starting Date
- Project number (s) trainee starting on
- Training program (classification) to be used; and
- Anticipated date of trainee employment
- Number of classroom training hours by subject

- B. If a contractor chooses to use a training program different from those listed in the OJT Program, or desires to train in a different classification, the training program must be submitted in its entirety for approval by the Department and FHWA. The training proposal must include the following:
1. The primary objective of the program: To provide training for minority, female and economically disadvantaged individuals for development to full journey status in the work classifications in which they are being trained.
 2. The minimum number of hours and type of training the trainee will receive as it relates to each specific task required to achieve journey status.
 3. Minimum wage.
 4. Trainee certification of completion.
 5. Records and reports submitted to the Contract Administration Office on a quarterly basis.

DEPARTMENT RESPONSIBILITY

1. Department project staff will monitor trainees on the project. They will monitor payrolls for payment of correct wage rates and fringe benefits. The Contract Administration Office will maintain a master list by contractor name, project number, trainee name and trainee social security number to aid project staff in monitoring trainees who work on multiple projects.
2. The Contract Administration Office may elect to interview trainees periodically during the training period to assess their performance and training program. To facilitate the interviews, the Contract Administration Office will contact contractors for the location of the trainees.

CONTRACTOR RESPONSIBILITY

1. Trainees must be identified on payrolls (i.e. dragline trainee).
2. The contractor will submit a quarterly report of training hours completed by trainees to the Contract Administration Office by the tenth working day of the first month of the new quarter using the Federal-Aid Highway Construction Contractors Monthly Training Report form (CAD-322). The trainee must also be provided a copy of the report.
3. When any trainee completes a program, or is terminated for a reason or reasons other than successful completion, the contractor must include the date of completion or an explanation for the termination and date of termination on the quarterly training report.
4. The contractor will assign each trainee to a particular person--either a supervisor or a journeyman/woman who is proficient in the craft the trainee is being trained in, to ensure that timely instructional experience is received by the trainee. This person, cooperating with the appropriate company personnel, will see that proper

records and the total intended training hours are completed during the allocated number of hours set up in the classification criteria.

5. The contractor has the prerogative of terminating the training period of the trainee and advancing the trainee to journey status. Approval requests must be submitted to the Contract Administration Office with an explanation (*refer to 2 above*).
6. Upon notification from the contractor, the Department will issue a certificate of completion to the trainee.
7. Trainees may be transferred to state-aid highway construction projects in order to complete the training program. If transfers are made the Contract Administration Office must be notified on the Quarterly Reporting Form. All of the training hours completed by trainees will count toward overall program completion.
8. Program reimbursements will be made directly to the prime or sub contractor.

CLASSROOM TRAINING

1. Classroom training programs must be pre-approved by the Department, if the contractor wishes to count the hours toward the trainee's training program.
 2. Contractors will be reimbursed for classroom training hours after the trainee has completed 20 hours of work on a highway construction project.
 3. Reimbursement for classroom training will be limited to 40 hours per trainee per construction season.
- **NOTE:** All proposed classroom training must be submitted as part of the trainee's OJT training program.

WAGE RATE

1. The wage rate for all trainees is \$5.15, during their OJT training program. Trainees shall be paid full fringe benefit amounts, where applicable. At the completion of the training program, the trainee shall receive the wages of a skilled journey.
2. For the purpose of this training program, a quarter does not represent three months. The first two quarters of a 500-hour training program would end after 250 hours. On a 750-hour training program, the first two quarters would end after 375 hours, the third quarter after 560 or an additional 186 hours of work and the fourth after 750 hours.

JOURNEY WORKER RATIO

The ratio of trainee to journey will be less than 1:4 and not more than 1:10.

RECRUITMENT AND SELECTION PROCEDURES

A. Prerequisites for Trainees

To be qualified for enrollment in the OJT Program, trainees must possess basic physical fitness for the work to be performed, dependability, willingness to learn and ability to follow instructions.

B. Licenses

Truck driver trainees must possess appropriate driver permits or licenses for the operation of Class A, B and C trucks. However, when an instructional permit is used in lieu of a license, the trainee must be accompanied by an operator who:

1. Holds a license corresponding to the vehicle being operated;
2. Has had at least one year of driving experience; and
3. Is occupying the seat next to the driver.

C. Recruitment

1. Notices and posters setting forth the contractor's Equal Employment Opportunity Policy and availability of training programs will be placed in areas readily accessible to employees, applicants for employment and potential employees.
2. The contractor must target minority, female or economically disadvantaged trainees.
3. The contractor will conduct systematic and direct recruitment through public and private employee referral sources. Contractors must submit the trainee's name and completed application form to the Contract Administration Office for review and approval. Approval must be obtained before the trainee can begin work under the training program.
4. Present employees will be screened for upgrading.

D. Selection

1. The selection and employment of a person by participating contractor shall qualify the person for the OJT Program.
2. Selection will be made without regard to race, color, religion, sex, age or national origin and shall be completely nondiscriminatory.
3. Employment of trainees will be in accordance with the work force requirements of the contractor. Each contractor will hire and train the trainees for uses in their own organization.
4. Written certification of individuals under the category of economically disadvantaged can be provided to the contractor at the time of the interview. This certification must then be provided to the Contract Administration Office with the other required information as part of the approval process for trainees.

- **NOTE:** The OJT Program is to provide training for minority, female and economically disadvantaged individuals in order that they may develop marketable skills and gain journey status in the skilled craft classifications in which they are being trained. However, this program does not exclude trainees that are not members of the above groups.

S E C T I O N 9 0 5 - P R O P O S A L

Date _____

Mississippi Transportation Commission
Jackson, Mississippi

Sirs: The following proposal is made on behalf of _____
_____ of _____

for constructing the following designated project(s) within the time(s) hereinafter specified.

The plans are composed of drawings and blue prints on file in the offices of the Mississippi Department of Transportation, Jackson, Mississippi.

The Specifications are the current Standard Specifications and Supplemental Specifications of the Mississippi Department of Transportation approved by the Federal Highway Administration, except where superseded or amended by the plans, Special Provisions and Notice(s) to Bidders attached hereto and made a part thereof.

I (We) certify that I (we) possess a copy of said Standard and Supplemental Specifications.

Evidence of my (our) authority to submit the Proposal is hereby furnished. The proposal is made without collusion on the part of any person, firm or corporation. I (We) certify that I (we) have carefully examined the Plans, the Specifications, including the Special Provisions and Notice(s) to Bidders, herein, and have personally examined the site of the work. On the basis of the Specifications, Special Provisions, Notice(s) to Bidders, and Plans, I (we) propose to furnish all necessary machinery, tools, apparatus and other means of construction and do all the work and furnish all the materials in the manner specified. I (We) understand that the quantities mentioned herein are approximate only and are subject to either increase or decrease, and hereby propose to perform any increased or decreased quantities of work at the unit prices bid, in accordance with the above.

Attached hereto is a certified check, cashier's check or Proposal Guaranty Bond in the amount as required in the Advertisement (or, by law).

INSTRUCTION TO BIDDERS: Alternate and Optional Items on Bid Schedule.

1. Two or more items entered opposite a single unit quantity WITHOUT DEFINITE DESIGNATION AS "ALTERNATE ITEMS" are considered as "OPTIONAL ITEMS". Bidders may or may not indicate on bids the Optional Item proposed to be furnished or performed WITHOUT PREJUDICE IN REGARD TO IRREGULARITY OF BIDS.
2. Items classified on the bid schedule as "ALTERNATE ITEMS" and/or "ALTERNATE TYPES OF CONSTRUCTION" must be preselected and indicated on bids. However, "Alternate Types of Construction" may include Optional Items to be treated as set out in Paragraph 1, above.
3. Optional items not preselected and indicated on the bid schedule MUST be designated in accordance with Subsection 907-102.06 prior to or at the time of execution of the contract.
4. Optional and Alternate items designated must be used throughout the project.

I (We) further propose to perform all "force account or extra work" that may be required of me (us) on the basis provided in the Specifications and to give such work my (our) personal attention in order to see that it is economically performed.

SECTION 905 -- PROPOSAL (CONTINUED)

I (We) further propose to execute the attached contract agreement (Section 902) as soon as the work is awarded to me (us), and to begin and complete the work within the time limit(s) provided for in the Specifications and Advertisement. I (We) also propose to execute the attached contract bond (Section 903) in an amount not less than one hundred (100) percent of the total of my (our) part, but also to guarantee the excellence of both workmanship and materials until the work is finally accepted.

I (We) enclose a certified check, cashier's check or bid bond for **five percent (5%) of total bid** and hereby agree that in case of my (our) failure to execute the contract and furnish bond within Ten (10) days after notice of award, the amount of this check (bid bond) will be forfeited to the State of Mississippi as liquidated damages arising out of my (our) failure to execute the contract as proposed. It is understood that in case I am (we are) not awarded the work, the check will be returned as provided in the Specifications.

Bidder acknowledges receipt of and has added to and made a part of the proposal and contract documents the following addendum (addenda):

ADDENDUM NO. _____	DATED _____	ADDENDUM NO. _____	DATED _____
ADDENDUM NO. _____	DATED _____	ADDENDUM NO. _____	DATED _____

TOTAL ADDENDA: _____
(Must agree with total addenda
issued prior to opening of bids)

Respectfully submitted, _____
Contractor

BY _____

TITLE _____

ADDRESS _____

Date _____, _____

(To be filled in if a corporation.)

Our corporation is chartered under the Laws of the State of _____ and the names, titles and business addresses of the executives are as follows:

_____ President	_____ Address
_____ Secretary	_____ Address
_____ Treasurer	_____ Address

The following is my (our) itemized proposal.

Revised 11/26/2003

SECTION 905

PROPOSAL (Sheet No. 2- 1)

CLEARING & GRUBBING, GUARDRAIL, MILL, & OVERLAY APPROX. 14.4 MILES OF I-55, FROM 0.5 MILE S. OF MS. 8 TO 0.4 MILE N. OF MS. 330, KNOWN AS FEDERAL AID PROJECT NO. IM-0055-03(076)/103395, IN THE COUNTIES OF GRENADA & YALOBUSHA, STATE OF MISSISSIPPI.

I (We) agree to complete the entire project within the specified contract time.

*** SPECIAL NOTICE TO BIDDERS ***

BIDS WILL NOT BE CONSIDERED UNLESS BOTH UNIT PRICES AND ITEM TOTALS ARE ENTERED

BIDS WILL NOT BE CONSIDERED UNLESS THE BID CERTIFICATE LOCATED AT THE END OF THE BID SHEETS IS SIGNED

BID SCHEDULE

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE		ITEM TOTAL	
						DOLLAR	CENT	DOLLAR	CENT
DIRECT PAY ITEMS									
(10)	201-B		83 acre		Clearing and Grubbing				
(20)	202-B		4,175 linear foot		Removal of Guard Rail				
(30)	202-B		6 each		Removal of Guard Rail Cable Anchor (Texas Twist Including Post & Rail)				
(40)	202-B		11,100 linear foot		Removal of Traffic Stripe				

(01/27/2004)

SECTION 905

IM-0055-03(076)/103395

PROPOSAL (Sheet No. 2- 2)

Grenada & Yalobusha County

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE		ITEM TOTAL	
						DOLLAR	CENT	DOLLAR	CENT
(50)	907-203-EX	(E)	4,500 cubic yard		Borrow Excavation (AH)(LVM) (Class B9)				
(60)	213-C		43 ton		Superphosphate				
(80)	220-A		43 acre		Insect Pest Control	30.0000		1,290.00	
(90)	907-225-A		86 acre		Grassing				
(100)	907-225-B		172 ton		Agricultural Limestone				
(110)	907-234-A		5,000 linear foot		Temporary Silt Fence				
(120)	235-A		500 bale		Temporary Erosion Checks				

(01/27/2004)

SECTION 905

IM-0055-03(076)/103395

PROPOSAL (Sheet No. 2- 3)

Grenada & Yalobusha County

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE		ITEM TOTAL	
						DOLLAR	CENT	DOLLAR	CENT
(130)	304-B	(GT)	2,500 ton		Granular Material (Class 3, Group D)				
(140)	907-403-E	(B) (A1)	5,400 ton		Hot Mix Asphalt, HT, 12.5-mm mixture, Polymer Modified, Leveling				
(150)	907-403-F		96,621 ton		Maintained Hot Mix Asphalt				
(160)	406-A		465,000 square yard		Cold Milling of Bituminous Pavement (All Depths)				
(170)	907-423-A		6 mile		Rumble Strips (Ground In)				
(171)	603-C-A	(S)	200 linear foot		24" Reinforced Concrete Pipe, Class III				
(172)	603-C-B	(S)	5 each		24" Reinforced Concrete End Section				

(01/27/2004)

SECTION 905

IM-0055-03(076)/103395

PROPOSAL (Sheet No. 2- 4)

Grenada & Yalobusha County

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE		ITEM TOTAL	
						DOLLAR	CENT	DOLLAR	CENT
(180)	606-A		150 each		Guard Post, Type II Modified				
(190)	606-B		5,400 linear foot		Guard Rail, Class A, Type 1				
(200)	606-C		17 each		Guard Rail, Cable Anchor, Type 1				
(210)	907-606-E		60 each		Guard Rail, Terminal End Section				
(211)	907-606-E		8 each		Guard Rail, Terminal End Section				
(220)	618-B		0 square foot		Additional Construction Signs	10.0000		0.00	
(230)	907-619-A1		100 mile		Temporary Traffic Stripe (Continuous White)				

(01/27/2004)

SECTION 905

IM-0055-03(076)/103395

PROPOSAL (Sheet No. 2- 5)

Grenada & Yalobusha County

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE		ITEM TOTAL	
						DOLLAR	CENT	DOLLAR	CENT
(240)	907-619-A2		100 mile		Temporary Traffic Stripe (Continuous Yellow)				
(250)	907-619-A3		90 mile		Temporary Traffic Stripe (Skip White)				
(260)	907-619-A5		20,500 linear foot		Temporary Traffic Stripe (Detail)				
(270)	907-619-A6		1,200 linear foot		Temporary Traffic Stripe (Legend)				
(280)	907-619-E3		2 each		Changeable Message Sign				
(290)	619-G4		72 linear foot		Barricades (Type III) (Double Faced)				
(300)	619-G4		72 linear foot		Barricades (Type III) (Single Faced)				

(01/27/2004)

SECTION 905

IM-0055-03(076)/103395

PROPOSAL (Sheet No. 2- 6)

Grenada & Yalobusha County

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE		ITEM TOTAL	
						DOLLAR	CENT	DOLLAR	CENT
(310)	619-G5		25 each		Free Standing Plastic Drums				
(320)	907-626-HH		600 linear foot		Thermoplastic Legend (White)(120 mil. min.)				
(330)	907-626-I		30 mile		6" Inverted Profile Thermoplastic Traffic Stripe (Skip White)				
(340)	907-626-J		38 mile		6" Inverted Profile Thermoplastic Traffic Stripe (Continuous White)				
(350)	907-626-L		34 mile		6" Inverted Profile Thermoplastic Traffic Stripe (Continuous Yellow)				
(370)	907-626-M		16,500 linear foot		Inverted Profile Thermoplastic Detail Traffic Stripe (6" Equivalent Length)(White)				
(380)	907-626-M		1,000 linear foot		Inverted Profile Thermoplastic Detail Traffic Stripe (6" Equivalent Length)(Yellow)				

(01/27/2004)

SECTION 905

IM-0055-03(076)/103395

PROPOSAL (Sheet No. 2- 7)

Grenada & Yalobusha County

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE		ITEM TOTAL	
						DOLLAR	CENT	DOLLAR	CENT
(390)	907-627-K		4,000 each		Red-Clear Reflective High Performance Raised Markers				
(400)	630-F		200 each		Delineators (Guard Rail)(White)				
(410)	630-F		200 each		Delineators (Guard Rail)(Yellow)				
(420)	630-F		190 each		Delineators (Post Mounted)(Double White)				
(430)	630-F		50 each		Delineators (Post Mounted)(Double Yellow)				
(440)	630-F		80 each		Delineators (Post Mounted)(Single White)				
(450)	630-F		50 each		Delineators (Post Mounted)(Single Yellow)				

(01/27/2004)

SECTION 905

IM-0055-03(076)/103395

PROPOSAL (Sheet No. 2- 8)

Grenada & Yalobusha County

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE		ITEM TOTAL	
						DOLLAR	CENT	DOLLAR	CENT

SUBTOTAL - DIRECT PAY ITEMS.....\$

DEPENDENT PAY ITEMS

(460) 618-A	lump sum Maintenance of Traffic	XXXXXXXXXXXX	XXXX		
		XXXXXXXXXXXX	XXXX		
		XXXXXXXXXXXX	XXXX		
		XXXXXXXXXXXX	XXXX		
(470) 620-A	lump sum Mobilization	XXXXXXXXXXXX	XXXX		
		XXXXXXXXXXXX	XXXX		
		XXXXXXXXXXXX	XXXX		
		XXXXXXXXXXXX	XXXX		

SUBTOTAL - DEPENDENT ITEMS.....\$

TOTAL BID - DIRECT AND DEPENDENT ITEMS\$ _____

COMPLETE ITEM NOS. 1, 2, AND/OR 3 AS APPROPRIATE. SEE NOTICE TO BIDDERS NO.5955 AND SUPPLEMENT.

- 1. I/We agree that no less than percent shall be expended with small business concerns owned and controlled by socially and economically disadvantaged individuals (DBE and WBE).
- 2. Classification of Bidder: Small Business (DBE) _____ Small Business (WBE) _____
- 3. A joint venture with a Small Business (DBE/WBE): YES _____

*** SIGNATURE STATEMENT ***

BIDDER ACKNOWLEDGES THAT HE/SHE HAS CHECKED ALL ITEMS IN THIS PROPOSAL FOR ACCURACY AND CERTIFIED THAT THE FIGURES SHOWN THEREIN CONSTITUTE THEIR OFFICIAL BID.

BIDDER'S SIGNATURE

CONDITIONS FOR COMBINATION BID

If a bidder elects to submit a combined bid for two or more of the contracts listed for this month's letting, the bidder must complete and execute these sheets of the proposal in each of the individual proposals to constitute a combination bid. In addition to this requirement, each individual contract shall be completed, executed and submitted in the usual specified manner.

Failure to execute this Combination Bid Proposal in each of the contracts combined will be just cause for each proposal to be received and evaluated as a separate bid.

COMBINATION BID PROPOSAL

I. This proposal is tendered as one part of a Combination Bid Proposal utilizing option ____* of Subsection 102.11 on the following contracts:

* Option to be shown as either (a), (b), or (c).

<u>Project No.</u>	<u>County</u>	<u>Project No.</u>	<u>County</u>
1. _____	_____	6. _____	_____
2. _____	_____	7. _____	_____
3. _____	_____	8. _____	_____
4. _____	_____	9. _____	_____
5. _____	_____	10. _____	_____

- A. If option (a) has been selected, then go to II, and sign Combination Bid Proposal.
- B. If option (b) has been selected, then complete the following, go to II, and sign Combination Bid Proposal.

SECTION 905 - COMBINATION BID PROPOSAL (Continued)

Project Number	Pay Item Number	Unit	Unit Price Reduction	Total Item Reduction	Total Contract Reduction
1. _____	_____ _____	_____ _____	_____ _____	_____ _____	
2. _____	_____ _____	_____ _____	_____ _____	_____ _____	
3. _____	_____ _____	_____ _____	_____ _____	_____ _____	
4. _____	_____ _____	_____ _____	_____ _____	_____ _____	
5. _____	_____ _____	_____ _____	_____ _____	_____ _____	
6. _____	_____ _____	_____ _____	_____ _____	_____ _____	
7. _____	_____ _____	_____ _____	_____ _____	_____ _____	
8. _____	_____ _____	_____ _____	_____ _____	_____ _____	

SECTION 905 - COMBINATION BID PROPOSAL (Continued)

Project Number	Pay Item Number	Unit	Unit Price Reduction	Total Item Reduction	Total Contract Reduction
9. _____	_____ _____	_____ _____	_____ _____	_____ _____	
10. _____	_____ _____	_____ _____	_____ _____	_____ _____	

C. If option (c) has been selected, then initial and complete one of the following, go to II. and sign Combination Bid Proposal.

_____ I (We) desire to be awarded work not to exceed a total monetary value of \$ _____.

_____ I (We) desire to be awarded work not to exceed _____ number of contracts.

II. It is understood that the Mississippi Transportation Commission not only reserves the right to reject any and all proposals, but also the right to award contracts upon the basis of lowest separate bids or combination bids most advantageous to the State.

It is further understood and agreed that the Combination Bid Proposal is for comparison of bids only and that each contract shall operate in every respect as a separate contract in accordance with its proposal and contract documents.

I (We), the undersigned, agree to complete each contract on or before its specified completion date.

SIGNED _____

**Certification with regard to the Performance of Previous
Contracts or Subcontracts subject to the Equal Opportunity
Clause and the filing of Required Reports**

The Bidder _____, proposed Subcontractor _____, hereby certifies that he has _____, has not _____, participated in a previous contract or subcontract subject to the Equal Opportunity Clause, as required by Executive Orders 10925, 11114, or 11246, and that he has _____, has not _____, filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

(COMPANY)

BY _____

(TITLE)

DATE: _____

NOTE: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7 (b) (1)), and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the Equal Opportunity Clause. Contracts and Subcontracts which are exempt from the Equal Opportunity Clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime Contractors and Subcontractors who have participated in a previous contract or subcontract subject to the Executive orders and have not filed the required reports should note that 41 CFR 60-1.7 (b) (1) prevents the award of contracts and subcontracts unless such Contractors submit a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U. S. Department of Labor.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

CERTIFICATION (Execute in duplicate)

State of Mississippi

County of _____

I, _____,
(Name of person signing certification)

individually, and in my capacity as _____ of
(Title)

_____ do hereby certify under
(Name of Firm, Partnership, or Corporation)

penalty of perjury under the laws of the United States and the State of Mississippi that _____

_____, Bidder
(Name of Firm, Partnership, or Corporation)

on Project No. _____,

in _____ Count _____, Mississippi, has not either

directly or indirectly entered into any agreement, participated in any collusion; or otherwise taken any action in restraint of free competitive bidding in connection with this contract; nor have any of its corporate officers or principal owners.

Except as noted hereafter, it is further certified that said legal entity and its corporate officers, principal owners, managers, auditors and others in a position of administering federal funds:

- a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in (b) above; and
- d) Have not within a three-year period preceding this application/ proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

Initial here "_____" if exceptions are attached and made a part thereof. Any exceptions shall address to whom it applies, initiating agency and dates of such action.

Note: Exceptions will not necessarily result in denial of award but will be considered in determining bidder responsibility. Providing false information may result in criminal prosecution or administrative sanctions.

The bidder further certifies that the certification requirements contained in Section XI of Form FHWA 1273, will be or have been included in all subcontracts, material supply agreements, purchase orders, etc. except those procurement contracts for goods or services that are expected to be less than the Federal procurement small purchase threshold fixed at 10 U.S.C. 2304(g) and 41 U.S.C. 253(g) (currently \$25,000) which are excluded from the certification requirements.

The bidder further certifies, to the best of his or her knowledge and belief, that:

- 1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this contract, Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions will be completed and submitted.

The certification contained in (1) and (2) above is a material representation of fact upon which reliance is placed and a prerequisite imposed by Section 1352, Title 31, U.S. Code prior to entering into this contract. Failure to comply shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000. The bidder shall include the language of the certification in all subcontracts exceeding \$100,000 and all subcontractors shall certify and disclose accordingly.

All of the foregoing and attachments (when indicated) is true and correct.

Executed on _____ Signature _____

(11/23/92F)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

CERTIFICATION (Execute in duplicate)

State of Mississippi

County of _____

I, _____,
(Name of person signing certification)

individually, and in my capacity as _____ of
(Title)

_____ do hereby certify under
(Name of Firm, Partnership, or Corporation)

penalty of perjury under the laws of the United States and the State of Mississippi that _____

_____, Bidder
(Name of Firm, Partnership, or Corporation)

on Project No. _____,

in _____ Count _____, Mississippi, has not either

directly or indirectly entered into any agreement, participated in any collusion; or otherwise taken any action in restraint of free competitive bidding in connection with this contract; nor have any of its corporate officers or principal owners.

Except as noted hereafter, it is further certified that said legal entity and its corporate officers, principal owners, managers, auditors and others in a position of administering federal funds:

- a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in (b) above; and
- d) Have not within a three-year period preceding this application/ proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

Initial here "_____" if exceptions are attached and made a part thereof. Any exceptions shall address to whom it applies, initiating agency and dates of such action.

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- 1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this contract, Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions will be completed and submitted.

The certification contained in (1) and (2) above is a material representation of fact upon which reliance is placed and a prerequisite imposed by Section 1352, Title 31, U.S. Code prior to entering into this contract. Failure to comply shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000. The bidder shall include the language of the certification in all subcontracts exceeding \$100,000 and all subcontractors shall certify and disclose accordingly.

All of the foregoing and attachments (when indicated) is true and correct.

Executed on _____ Signature _____

(11/23/92F)

SECTION 902

CONTRACT FOR _____
LOCATED IN THE COUNTY OF _____
STATE OF MISSISSIPPI,
COUNTY OF HINDS

This contract entered into by and between the Mississippi Transportation Commission on one hand, and the undersigned contractor, on the other witnesseth;

That, in consideration of the payment by the Mississippi Transportation Commission of the prices set out in the proposal hereto attached, to the undersigned contractor, such payment to be made in the manner and at the time of times specified in the specifications and the special provisions, if any, the undersigned contractor hereby agrees to accept the prices stated in the proposal in full compensation for the furnishing of all materials and equipment and the executing of all the work contemplated in this contract.

It is understood and agreed that the advertising according to law, the Advertisement, the instructions to bidders, the proposal for the contract, the specifications, the revisions of the specifications, the special provisions, and also the plans for the work herein contemplated, said plans showing more particularly the details of the work to be done, shall be held to be, and are hereby made a part of this contract by specific reference thereto and with like effect as if each and all of said instruments had been set out fully herein in words and figures.

It is further agreed that for the same consideration the undersigned contractor shall be responsible for all loss or damage arising out of the nature of the work aforesaid; or from the action of the elements and unforeseen obstructions or difficulties which may be encountered in the prosecution of the same and for all risks of every description connected with the work, exceptions being those specifically set out in the contract; and for faithfully completing the whole work in good and workmanlike manner according to the approved Plans, Specifications, Special Provisions, Notice(s) to Bidders and requirements of the Mississippi Department of Transportation.

It is further agreed that the work shall be done under the direct supervision and to the complete satisfaction of the Executive Director of the Mississippi Department of Transportation, or his authorized representatives, and when Federal Funds are involved subject to inspection at all times and approval by the Federal Highway Administration, or its agents as the case may be, or the agents of any other Agency whose funds are involved in accordance with those Acts of the Legislature of the State of Mississippi approved by the Governor and such rules and regulations issued pursuant thereto by the Mississippi Transportation Commission and the authorized Federal Agencies.

The Contractor agrees that all labor as outlined in the Special Provisions may be secured from list furnished by

It is agreed and understood that each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and this contract shall be read and enforced as though it were included herein, and, if through mere mistake or otherwise any such provision is not inserted, then upon the application of either party hereto, the contract shall forthwith be physically amended to make such insertion.

The Contractor agrees that he has read each and every clause of this Contract, and fully understands the meaning of same and that he will comply with all the terms, covenants and agreements therein set forth.

Witness our signatures this the _____ day of _____, _____.

Contractor (s)

By _____

MISSISSIPPI TRANSPORTATION COMMISSION

Title _____

By _____

Signed and sealed in the presence of:
(names and addresses of witnesses)

Executive Director

Secretary to the Commission

Award authorized by the Mississippi Transportation Commission in session on the ____ day of _____, _____, Minute Book No. _____, Page No. _____.

S E C T I O N 9 0 3

CONTRACT BOND FOR: _____

LOCATED IN THE COUNTY OF: _____

STATE OF MISSISSIPPI,

COUNTY OF HINDS

Know all men by these presents: that we, _____

_____ Principal, a _____

residing at _____ in the State of _____

and _____

residing at _____ in the State of _____,

authorized to do business in the State of Mississippi, under the laws thereof, as surety, are held and firmly bound unto the State of Mississippi in the sum of _____

(\$ _____) Dollars, lawful money of the United States of America, to be paid to it for which payment well and truly to be made, we bind ourselves, our heirs, administrators, successors, or assigns jointly and severally by these presents.

Signed and sealed this the _____ day of _____ A.D. _____.

The conditions of this bond are such, that whereas the said _____

principal, has (have) entered into a contract with the Mississippi Transportation Commission, bearing the date of ____ day of _____ A.D. _____ hereto annexed, for the construction of certain highways in the State of Mississippi as mentioned in said contract in accordance with the plans, specifications and special provisions therefor, on file in the offices of the Mississippi Department of Transportation, Jackson, Mississippi.

Now therefore, if the above bounden _____

_____ in all things shall stand to and abide by and well and truly observe, do keep and perform all and singular the terms, covenants, conditions, guarantees and agreements in said contract, contained on his (their) part to be observed, done, kept and performed and each of them, at the time and in the manner and form and furnish all of the material and equipment specified in said contract in strict accordance with the terms of said contract which said plans, specifications and special provisions are included in and form a part of said contract and shall maintain the said work contemplated until its final completion and acceptance as specified in Subsection 109.11 of the approved specifications, and save harmless said Mississippi Transportation Commission from any loss or damage arising out of or occasioned by the negligence, wrongful or criminal act, overcharge, fraud, or any other loss or damage whatsoever, on the part of said principal (s), his (their) agents, servants, or employees in the performance of said work or in any manner connected therewith, and shall be liable and responsible in a civil action instituted by the State at the instance of the Mississippi Transportation Commission or any officer of the State authorized in such cases, for double any amount in money or property, the State may lose or be overcharged or otherwise defrauded of, by reason of wrongful or criminal act, if any, of the Contractor(s), his (their) agents or employees, and shall promptly pay the said agents, servants and employees and all persons furnishing labor, material, equipment or supplies therefor, including premiums incurred, for Surety Bonds, Liability Insurance, and Workmen's Compensation Insurance; with the additional obligation that such Contractor shall promptly make payment of all taxes,

SECTION 903 - CONTINUED

licenses, assessments, contributions, damages, any liquidated damages which may arise prior to any termination of said principal's contract, any liquidated damages which may arise after termination of the said principal's contract due to default on the part of said principal, penalties and interest thereon, when and as the same may be due this state, or any county, municipality, board, department, commission or political subdivision: in the course of the performance of said work and in accordance with Sections 31-5-51 et seq. Mississippi Code of 1972, and other State statutes applicable thereto, and shall carry out to the letter and to the satisfaction of the Executive Director of the Mississippi Department of Transportation, all, each and every one of the stipulations, obligations, conditions, covenants and agreements and terms of said contract in accordance with the terms thereof and all of the expense and cost and attorney's fee that may be incurred in the enforcement of the performance of said contract, or in the enforcement of the conditions and obligations of this bond, then this obligation shall be null and void, otherwise to be and remain in full force and virtue.

Witness our signatures and seals this the _____ day of _____ A.D. _____.

_____	_____
(Contractors) Principal	Surety
By _____	By _____
	(Signature) Attorney in Fact

Title _____	_____
(Contractor's Seal)	(Name and address of local (Mississippi) representative.)
	(Surety Seal)

Revised 1/18/2000

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
OFFICE OF CIVIL RIGHTS
JACKSON, MISSISSIPPI

LIST OF FIRMS SUBMITTING QUOTES

I/we received quotes from the following firms on Project No: _____
County: _____

Disadvantaged Business Enterprise (DBE) Regulations as stated in 49 CFR 26.11 require the Mississippi Department of Transportation (MDOT) to create and maintain a comprehensive list of all firms quoting/bidding subcontracts on prime contracts and quoting/bidding subcontracts on federally-funded transportation projects. For every firm, we require the following information:

Firm Name: _____
Contact Name/Title: _____
Firm Mailing Address _____
Phone Number: _____
_____ DBE Firm _____ Non-DBE Firm

Firm Name: _____
Contact Name/Title: _____
Firm Mailing Address _____
Phone Number: _____
_____ DBE Firm _____ Non-DBE Firm

Firm Name: _____
Contact Name/Title: _____
Firm Mailing Address _____
Phone Number: _____
_____ DBE Firm _____ Non-DBE Firm

Firm Name: _____
Contact Name/Title: _____
Firm Mailing Address _____
Phone Number: _____
_____ DBE Firm _____ Non-DBE Firm

Firm Name: _____
Contact Name/Title: _____
Firm Mailing Address _____
Phone Number: _____
_____ DBE Firm _____ Non-DBE Firm

SUBMITTED BY (Signature)

FIRM NAME

Submit this form to **Contract Administration as a part of your bid package**. If this form is not included as part of the bid packet, your bid will be deemed irregular. For further information about this form, call Mississippi DOT's Office of Civil Rights at (601) 359-7466; FAX (601) 576-4504. **Please make copies of this form when needed and also add those copies to the bid package.**

MAINTENANCE BOND

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MAINTENANCE BOND FOR: _____

LOCATED IN THE COUNTY OF: _____

STATE OF MISSISSIPPI

COUNTY OF HINDS

Know all men by these presents: that we, _____

_____, Principal, a _____

residing at _____ in the State of _____

and _____

residing at _____ in the State of _____,

authorized to do business in the State of Mississippi, under the laws thereof, as surety, are held

and firmly bound unto the State of Mississippi in the sum of _____

(\$_____) Dollars, lawful money of the United States of America, to be paid to it for which payment well and truly to be made, we bind ourselves, our heirs, administrators, successors, or assigns jointly and severally by these presents.

Signed and sealed this the _____ day of _____, _____.

The condition of the above referenced obligation is that the Principal or Contractor will maintain the pavement on the finished roadway for a period of seven (7) years, commencing on the date of the final inspection as documented in writing by the State Construction Engineer. The Principal is required to maintain the travel lanes placed on the project against defects in materials or workmanship as governed by the Special Provisions of the contract; and such maintenance is to be in accordance with the Special Provisions of the contract (which is made a part of this bond) for maintained asphalt pavement. If the Principal satisfactorily fulfills the above condition, then this obligation shall be null and void; otherwise such obligation is to remain in full force and effect.

It is agreed that no modifications, omissions, additions in or to the terms of the contract or in or to the plans or specifications shall affect the obligations of the Surety on its bond.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if said Principal shall faithfully carry out and perform the said maintenance, and shall, on due notice, repair and make good at its own expense any and all defects in materials or workmanship in the said work which may develop during the period specified above or shall pay over, make good and reimburse to the Mississippi Department of Transportation all loss which it may sustain by reason of failure or default of said Principal so to do, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

In the event suit is brought upon this bond by the Mississippi Department of Transportation or the Mississippi Transportation Commission and judgment is recovered, the Surety shall pay all costs incurred by the Mississippi Department of Transportation in such suit, including reasonable attorney's fee to be fixed by the court.

Witness our signatures and seals this the ____ day of _____, ____.

(Contractor) Principal

Surety

By _____

By _____
(Signature) Attorney in Fact

Title _____
(Contractor's Seal)

(Name and address of local (Mississippi)
representative) (Surety Seal)

PROJECT NUMBER	IM-0055-03(076)/103395/301000
COUNTY	GRENADA & YALOBUSHA

[illegible]

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
HAUL PERMIT FOR BRIDGES
WITH
POSTED LOAD LIMITS

DATE: _____

PROJECT: IM-0055-03(076) / 103395

COUNTY: GRENADA & YALOBUSHA COUNTIES

LOCATION: FROM 0.5 MILE SOUTH OF SR 8 TO 0.4 MILE NORTH OF SR330.

A permit is issued to _____ for transporting loads exceeding the posted limit for any such bridge located on State designated routes within the project termini provided that such transport vehicles comply with all other governing statutory load limits.

This permit is valid on all State designated routes from the point of origin to the point of delivery for materials and equipment utilized in construction of said project and also valid for sub-contractors and vendors upon written permission of the Contractor. The permit is non-transferable and no other haul permit for posted bridges will be issued to other individuals, vendors, or companies for construction of this project.

A copy of this signed permit shall be carried in all vehicles operating under the authority of this permit and also a copy of the Contractor's written permission when the vehicle is other than Contractor owned.

In accordance with State law, the above named Contractor will be liable for damages directly attributable to vehicles operating under this permit.

EXECUTIVE DIRECTOR